MARINE SAFETY OFFICE PROVIDENCE

SEVERE WEATHER PLAN

U. S. DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

U.S. Department of Transportation
United States Coast Guard

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MSOPROVINST 3010.1

MARINE SAFETY OFFICE PROVIDENCE INSTRUCTION 3010.1

Subj: Marine Safety Office Providence Severe Weather Contingency Plan

Ref: (a) First District Contingency Response Plan, OPLAN 9710-95
(b) Atlantic Area Port Operations Severe Weather Policy, LANTAREAINST 16601
(c) MSO Providence Watchstander's Guide, MSOPROVINST M1601.2
(d) Responsibilities of MSO Providence Personnel During Continuity of Operations Plan (COOP) Activities, MSOPROVINST 5401.31

1. PURPOSE: This contingency plan provides guidance for operations before, during and immediately following periods of severe weather, including hurricanes, impacting the MSO Providence area of responsibility. This contingency plan supports references (a) through (d).

2. ACTION: All MSO Providence personnel shall comply with the provisions of this instruction.

3. DISCUSSION:

a. When using this plan you will notice a difference in terminology between what's published in references (a) and (b). This is the result of the First District Contingency Response Plan, OPLAN 9710-95, not incorporating the standard port condition terminology contained in the Atlantic Area Port Operations Severe Weather Policy, LANTAREAINST 16601, dated 19 SEP 00. In an effort to meet the requirements of the First District and Atlantic Area, this plan incorporates both terms, i.e., OPLAN 9710-95 hurricane conditions 4, 3, 2, 1 are synonymous with LANTAREAINST 16601 port conditions WHISKEY, X-RAY, YANKEE, ZULU. Specific definitions and comparison graph are located in chapter 2.

b. The Response and Planning Department is responsible for reviewing this instruction annually and initiating revisions as appropriate. Each department and field office will assist with this review, including a thorough annual review of the checklists contained in chapter 2.

Mark G. VanHaverbeke

Distribution: CO, XO, Department Heads, Planning Officer, CDO kit, Break-in CDO kit, MSFO New Bedford , MSFO Cape Cod, extra (3). (14) total copies.

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RECORD OF CHANGES

Change Number	Date of Change	Date Entered	By Whom Entered
CH1	14 JUL 04	16 JUL 04	LT Matt Rudick

MSO PROVIDENCE SEVERE WEATHER CONTINGENCY PLAN

RECORD OF REVIEW

Date of Review	Reviewed By

CHAPTER 1 - INTRODUCTION

A. General. Various forms of natural disasters present a serious threat to life and property within the Captain of the Port (COTP) Providence zone. Natural disasters may include blizzards, nor'easters, floods, tornadoes, earthquakes, and hurricanes. By far, hurricanes pose the greatest threat to this area and can cause significant property damage as well as pose a serious risk to the safety of life and the environment. This plan is especially cognizant of the vulnerability of commercial vessels, marine transportation, and marine facilities, which may lie in the path of a hurricane. Proper liaison and planning among maritime interests can mitigate the threats presented by impending hurricanes or severe weather.

B. Authority. This plan is derived from the authorities contained in 14 U.S.C. 88, U.S. Coast Guard Marine Safety Manual Volume VII (Port Security), Coast Guard First District OPLAN 9710-95, Executive Order (E.O.) 10173, Executive Order (E.O.) 12656, and the Ports and Waterways Safety Act of 1972 (PWSA). It supports the policies of the Commandant; the Commander, Atlantic Area; and the Commander, First Coast Guard District.

C. Purpose. This contingency plan provides guidance and direction for preparedness to minimize damage and to protect lives and property in the event of severe weather.

D. Definitions. The following definitions apply to this plan:

Blizzard Warning. Issued for sustained or gusty winds of 35 mph or more, and falling or blowing snow creating visibilities at or below ¼ mile; these conditions should persist for at least three hours.

Cyclone. An atmospheric disturbance marked by masses of air rapidly circulating counter-clockwise about a low pressure center and/or a violent rotating windstorm.

Danger-Quadrant/Dangerous Semicircle. The northeastern quadrant or right-hand semicircle of a hurricane having the highest winds/seas.

Extratropical Cyclone. Is the much larger scale, usually less intense, frontal cyclone of middle latitudes. These cyclones lie outside the scope of the Hurricane Warning Service - although many Tropical and a few Subtropical Cyclones adopt Extratropical characteristics or merge with existing Extratropical cyclones before dissipating, if they move sufficiently far north to encounter cold air.

Floods. Water over flowing onto normally dry land.

Flood Tide. A tide at its greatest height.

Freezing Rain. Rain that falls onto a surface with a temperature below freezing. This causes it to freeze to surfaces, such as trees, cars, and roads, forming a coating or glaze of ice. Even small accumulations of ice can cause a significant hazard.

Gale Warning. An advisory of strong winds. The advisory is given when winds 39 to 54 miles per hour (34 to 47 knots) are forecasted or are occurring.

Hurricane. A severe tropical cyclone in which winds spiral counterclockwise around a core or "eye" of low pressure, with maximum wind velocities 74 miles per hour (64 knots) and higher. (see Figure 1-1 for Hurricane Categories.)

Figure 1-1 - HURRICANE CATEGORIES

CATEGORY	WIND SPEED (mph)	STORM SURGE
1	74 - 95	4-5 Feet
2	96 - 110	6-8 Feet
3	111 - 130	9-12 Feet
4	131 - 154	13-18 Feet
5	155 or greater	More Than 18 Feet

Hurricane "Eye". This is an area of light to calm winds with partly cloudy skies at the center of a storm circulation. One of the criteria for upgrading a tropical depression to a tropical storm is the formation of an eye.

Hurricane Season. A period between the months of 1 June through 30 November.

Hurricane Warning. A warning that indicates that hurricane force winds of 74 mph (64 knots) and higher, or a combination of dangerously high water and rough seas, are expected to impact a specified coastal area. When a hurricane warning is announced, hurricane conditions are considered imminent and may begin immediately or at least within the next 12 to 24 hours. When a warning is announced, it is of utmost importance that precautionary measures are taken for protection of life and property.

Hurricane Watch. An advance statement, not a warning, indicating that a hurricane is approaching and attention should be given to subsequent advisories. It implies the possibility of dangerous conditions within 24 to 48 hours. Precautionary action should be taken in case hurricane warnings are forthcoming.

Natural Disaster. Widespread or severe damage, injury, or loss of life or property resulting from any natural or man-made cause, including but not limited to fire, flood, earthquake, storm, wind, wave action, oil or hazardous substance discharge or other water contamination requiring emergency action to avert danger or damage, volcanic activity, epidemic, air contamination, blight, drought, accident, infestation, or explosion.

Nor'easter. A low pressure disturbance forming along the South Atlantic coast of the U.S. and moving northeast along the Middle Atlantic and New England coasts to the Atlantic Provinces of Canada. It usually causes strong northeast winds with rain or snow and coastal flooding and beach erosion. These storms are also known as Northeasters or Coastal Storms.

Recurvature. The natural tendency of a tropical cyclone to curve to the right in the northern latitudes.

Seiche. A wave that oscillates in partially or totally enclosed bodies of water from a few minutes to a few hours caused by seismic or atmospheric disturbances.

Sleet. Rain drops that freeze into ice pellets before reaching the ground. Sleet usually bounces when hitting a surface and does not stick to objects. However it can accumulate like snow and cause a hazard to motorists.

SLOSH. The output of the NOAA storm surge prediction model SLOSH (Sea, Lake, and Overland Surges from Hurricanes).

Snow Flurries. Light snow falling for short durations. No accumulation or light dusting is all that is expected.

Snow Showers. Snow falling at varying intensities for brief periods of time. Some accumulation is possible.

Snow Squalls. Brief, intense snow showers accompanied by strong, gusty winds. Accumulation may be significant.

Storm Surge. Storm surge is a rapid rise in the water level above the normal tide level on the open coast due to the effects of hurricane winds and low barometric pressure on the water surface. It is evidenced by a large dome of water that sweeps across the coastline near the area where the eye of the hurricane makes landfall.

Storm Tide. The actual level of sea water resulting from the astronomic tide combined with the storm surge.

Storm. An atmospheric disturbance manifested by strong winds accompanied by rain, snow, or other precipitation and often by thunder and lightning.

Storm Track. A storm's direction of travel.

Storm Warning. A warning given when winds are 55-73 miles per hour (38-63 knots).

Thunderstorm. An electrical storm accompanied by heavy rain. Sometimes accompanied by extremely strong winds with gusts of 46 to 115 miles per hour (40 to 100 knots), torrential rainfall and potential flooding.

Tornado. A rotating column of air usually accompanied by a funnel-shaped downward extension of a cumulonimbus cloud and having a vortex several hundred yards in diameter whirling destructively at speeds of up to 300 miles per hour (261 knots).

Tropical Depression. A tropical cyclone with a maximum surface wind speed of 38 miles per hour (33 knots) or less which is expected to increase to storm intensity.

Tropical Storm. A distinct low-pressure area defined by a counterclockwise rotation and winds of 30 to 74 miles per hour (26 to 64 knots).

Tropical Storm Warning. An alert that tropical storm conditions, including sustained winds of 39 to 73 miles per hour (34 to 63 knots), are expected in specific areas within 24 hours.

Tropical Storm Watch. An alert for a specific area in which a tropical storm may pose a threat within 36 hours.

Wavelet. A small wave or ripple.

Wind. Moving air, especially a natural and perceptible current of air parallel to or along the ground. A movement or current of air blowing from one of the four cardinal points of the compass. (See Figure 1-2 for sea state descriptions.)

Wind Chill Advisory. Issued when wind chill temperatures are expected to be between 20 and 34 degrees below zero.

Wind Chill Warning. Issued when wind chill temperatures are expected to be less than 34 degrees below zero.

Winter Storm Outlook. Issued prior to a Winter Storm Watch. The Outlook is given when forecasters believe winter storm conditions are possible and are usually issued 48 to 60 hours in advance of a winter storm. For in depth information on winter storms, please see link: Winter Storms, A Deceptive Killer

Winter Storm Warning. Issued when a combination of heavy snow, heavy freezing rain, or heavy sleet is expected. Winter Storm Warnings are usually issued 6 to 24 hours before the event is expected to begin.

Winter Storm Watch. Alerts the public to the possibility of a blizzard, heavy snow, freezing rain, or heavy sleet. Winter Storm Watches are usually issued 12 to 36 hours before the beginning of a Winter Storm.

Winter Weather Advisories. Issued for accumulations of snow, freezing rain, and sleet which will cause significant inconvenience and moderately dangerous conditions.

Figure 1-2 - Sea State Descriptions

FORCE	WIND SPEED (knots)	SEA STATE
0	<1	Mirror like.
1	1-3	Ripples.
2	4-6	Small wavelets, crests do not break.
3	7-10	Large wavelets, crests do break.
4	11-16	Small waves, fairly frequent "white horses."
5	17-21	Moderate waves, many "white horses", w/chance of spray.
6	22-27	Large waves begin to form, white foam crests more extensive, probably some spray.
7	28-33	Sea heaps up, white foam from breaking waves begins to be blown in streaks along the direction of the wind.
8	34-40	Spin drift, foam blown in well-marked streaks along the direction of the wind.
9	41-47	High waves, dense streaks of foam, crests of waves begin topple and roll over, spray may affect visibility.
10	48-55	Very high waves with long hanging crests, foam blown in dense white streaks, surface of these takes on a white appearance, visibility affected.
11	55-63	Exceptional water waves.
12	64-71	Air filled with foam, sea completely white with driving spray, visibility greatly reduced.

E. Background.

1. Tropical storms, hurricanes, blizzards, Nor'easters are the natural disasters most likely to affect the COTP Providence AOR. This plan describes actions to be taken by Coast Guard Marine Safety Office Providence in the event of such heavy weather.

a. The hurricane season is 1 June through 30 November (hurricanes occurring outside the official seasons are rare but possible). Disastrous hurricanes are relatively infrequent occurrences for any particular segment of coastline; however, the destructive potential is so great that adequate planning is essential to prevent loss of life and property. Damage due to hurricanes in the United States averages a half billion dollars annually. The "hurricane of record" for Providence, RI is the 1938, Category 3 hurricane, which had sustained winds of 121 miles per hour, gusts up to 186 mph, and a 15-foot storm surge, that left 564 persons dead.

b. Storms and their related winds and storm surges may destroy Coast Guard assets, disrupt the aids to navigation, destroy bridges, alter or block ship channels, and cause oil and hazardous substance spills. Additionally, hurricanes making landfall can spawn tornadoes, as occurred when Hurricane Bob struck southern New England in 1991. These intense weather systems create dangerous conditions for all classes of vessels and for commercial facilities in the port area.

c. Oil spills and hazardous substance releases are addressed in the Rhode Island and Southeastern Massachusetts Area Contingency Plan (ACP) for Oil and Hazardous Substance Pollution Response.

d. While severe damage may result from hurricane force winds, the most dangerous aspect of a tropical storm is storm surge flooding. All coastal areas are considered hazard zones for hurricane storm surge. Nine of every ten hurricane-related deaths are cause by storm surge flooding. Secondary causes of death and injury are electrocution from fallen power lines and trauma from flying debris.

e. The Marine Safety Office Providence Area of Responsibility (AOR) is defined in 33 C.F.R. § 3.05-20. Containing hundreds of miles of shoreline, it is a relatively large Captain of the Port zone with a diverse coastal topography. The AOR extends from Watch Hill, Rhode Island in the south to a point just beneath Plymouth, Massachusetts in the north. This zone encompasses three major bays: Narragansett Bay, Buzzards Bay and Cape Cod Bay, and six large islands: Block Island, Aquidneck Island (Newport), Conanicut Island (Jamestown), Prudence Island, Martha's Vineyard and Nantucket. The Cape Cod Canal and the entire Cape itself are within the MSO Providence AOR. New Bedford, Massachusetts is home to one of the largest commercial fishing fleets in the country, and another substantial fishing fleet hails from Point Judith, Rhode Island. Hurricane barriers that are operated by the Army Corps of Engineers (ACOE) and the City of Providence protect the cities of New Bedford and Providence respectively. The Cape Cod Canal, also operated by the ACOE, is a busy transportation link for waterborne commerce between Boston and New York. The entire canal falls within the MSO Providence AOR.

f. Hurricane Havens – Newport, RI. The Hurricane Havens Handbook for the North Atlantic Ocean, published in 1984, provides historical information regarding use of lower Narragansett Bay as a suitable haven for vessels. It provides relevant data to assist decision makers regarding how to ride out a storm. The following link accesses the Hurricane Havens Handbook for the North Atlantic Ocean (https://www.cnmoc.navy.mil/nmosw/handbk.htm).

g. 2. Primary responsibility for disaster preparedness and response rests with state and local governments. However, federal assistance may be provided when state and local governments are unable to cope with the effects of a disaster. The federal government has established the Federal Response Plan (FRP) and when implemented, the Federal Emergency Management Agency (FEMA, http://www.fema.gov) is the lead federal agency responsible for managing all federal government efforts supporting U.S. territories, state and local disaster relief operations. FEMA is responsible for planning, managing and coordinating financial assistance to state and local governments. They also supply mobile emergency communications centers, supplies and equipment. Coordinated through FEMA, the DOT Emergency Organization is tasked by Executive and DOT orders with marshalling, regulating and facilitating the use of transportation resources (commercial and private air, rail, highway, and sea transport) to support disaster relief. The Coast Guard, as part of the Department of Transportation, may be called upon to assist in saving lives, protect property, and aid other government agencies.

a. Unit Preparedness. This unit contingency plan supplements First Coast Guard District Contingency Response Plan 9710-95 OPLAN. The Response and Planning Department is responsible for maintaining and updating this plan on an annual basis (see chapter 2 for additional information). The 9710-95 OPLAN sets forth the coordination between all First District units, whereas this plan details local and internal actions to be taken by MSO Providence in the event of severe weather.

b. Memorandums of Understanding.

(1.) MOU Between the Department of the Army and the USCG: USCG and Department of the Army Responses to Marking and Removing of Sunken Vessels and Other Obstructions to Navigation, 85-1, of 16 OCT 85 (see Annex I).

(2.) USCG Cooperation with the American National Red Cross in Disaster Relief, 75-1, of 4 APR 75 (see Annex I).

F. Summary of New England Hurricane Climatology.

The following information was taken from ***SOUTHERN NEW ENGLAND TROPICAL STORMS AND HURRICANES, A Ninety-eight Year Summary 1909-1997,*** by David R. Vallee and Michael R. Dion, National Weather Service, Taunton, MA.

Hurricanes and tropical storms are no strangers to southern New England. The earliest colonial records in the region note several extremely intense hurricanes, which caused considerable destruction. Forty such storms have affected the region since 1900, either making landfall along the coast or passing close enough over the offshore waters to spread tropical storm or hurricane force conditions into the area. The intensities of these systems have ranged from weak, disorganized tropical storms to full fledged major hurricanes. The one feature common to almost all of the storms was a rapid acceleration toward southern New England, which greatly reduced the time to prepare and evacuate.

Tropical cyclones that have affected southern New England have brought a variety of weather conditions. Some of the weaker storms have passed with hardly a whimper, producing only some occasional heavy showers and periods of gusty winds. Some systems have brought torrential rains and inland flooding, while still others have brought a combination of fierce winds and widespread tree and structural damage. Some have also brought devastating storm surges that crashed onto the coast, severely crippling coastal communities.

A. Cyclone Frequency

1. Yearly Statistics

- Forty tropical cyclones have affected southern New England since 1936; 16 were tropical storms, and 24 were hurricanes.
- The most active decade for tropical cyclone activity: the 1950s, when ten tropical cyclones affected the area; seven were hurricanes.
- The second most active decade: the 1960s, with eight tropical cyclones; six of them hurricanes.
- For six consecutive years, from 1958 to 1963, at least one tropical cyclone affected the area each season.
- The longest period between tropical cyclone events: 8 years, from 1977 through 1984.
- The most storms to affect southern New England in one season: three, occurring in 1954, when hurricanes Carol, Edna and Hazel affected New England.

2. Monthly Statistics

- The most likely months for tropical cyclone activity in southern New England: August and September
- Eighteen tropical cyclones have occurred in September, and twelve in August.
- The remaining storms were nearly evenly divided between June, July, and October, with five occurring in July, three in October, and two in June.
- The earliest tropical cyclone to affect southern New England: Tropical Storm Agnes, on June 22, 1972.
- The earliest hurricane to affect the area: Hurricane Belle, on August 9 and 10, 1976.
- The latest the area was affected by a tropical cyclone: October 29, 1963--Hurricane Ginny.

B. Wind Data

The wind speeds discussed below were recorded at various National Weather Service Offices, including Warwick, RI, Block Island, RI, Boston, MA, the Blue Hill Meteorological Observatory in Milton, MA, and occasionally from airports and Coast Guard installations.

- The strongest sustained 1-minute wind speed and wind gust ever recorded from a hurricane was at the Blue Hill Observatory in Milton, MA, during the Great New England Hurricane in 1938.
- A sustained wind of 121 mph with a peak gust to 186 mph was recorded.
- Other notable wind records include wind gusts to 135 during Hurricane Carol and 130 mph during Hurricane Donna, both of which were recorded on Block Island.
- Sustained winds of 100 mph with a peak gust to 125 mph occurred in downtown Providence during Hurricane Carol.
- Hurricane Bob produced sustained winds of 100 mph with a peak gust to 125 mph at North Truro on Cape Cod. The storm toppled a large steel water tower on Otis Air National Guard Base.

C. Storm Surge

The Great New England Hurricane of 1938 produced the greatest storm tides this century in southern New England. The storm tide reached 19.01 feet (MLLW) at the State Street Station Dock on the upper part of Narragansett Bay during the 1938 Hurricane, associated with a 13.7 foot storm surge. Hurricane Carol brought a slightly higher storm surge, 14.4 feet over the upper portions of Narragansett Bay, but produced a slightly lower storm tide of 17.51 feet (MLLW), due to its arrival shortly after high tide.

D. Precipitation

The greatest 24 hour rainfall ever recorded in Southern New England from a tropical cyclone occurred in Westfield, MA during Tropical Storm Diane in 1955. An incredible 18.15 inches fell during the storm, causing catastrophic flooding and a storm total of 19.76 inches.

E. Pressure Data

- The lowest barometric pressure ever recorded in southern New England was observed at Middletown, Connecticut during the Great New England Hurricane of 1938, with a pressure of 28.00 inches.
- A pressure of 27.94 inches was recorded on Long Island as the eye of the Great New England Hurricane of 1938 passed.
- Hurricane Edna produced a pressure of 28.02 inches at Edgartown, MA, on Martha's Vineyard.

F. Storm Speed

- The Great New England Hurricane of 1938 had the fastest forward speed when it struck southern New England: 60 mph.
- Hurricane Gerda in 1969 ranked second with a forward speed of 48 mph.
- The slowest moving systems to affect southern New England were Hurricane Esther in 1961 with an average speed of only 6 mph, and Hurricane Edouard in 1996 with an average speed of 14 mph.

G. Summary of Significant New England Hurricanes.

THE GREAT NEW ENGLAND HURRICANE of 1938

(**CAT 3 -** September 21, 1938)

The Great New England Hurricane of 1938 was one of the most destructive and powerful storms ever to strike southern New England. This system developed on September 4 in the far eastern Atlantic, near the Cape Verde Islands. It made a twelve-day journey across the Atlantic and up along the eastern seaboard before crashing ashore on September 21 at Suffolk County, Long Island, then into Milford, Connecticut. The eye of the hurricane was observed in New Haven, Connecticut, 10 miles east of Milford. The center made landfall at the time of astronomical high tide, moving north at 60 mph. Unlike most storms, the hurricane did not weaken on its way toward southern New England, due to its rapid forward speed and its track which kept the center of the storm over the warm waters of the Gulf Stream.

Sustained hurricane force winds occurred throughout most of southern New England. The strongest winds ever recorded in the region occurred at the Blue Hill Observatory with sustained winds of 121 mph and a peak gust of 186 mph. Sustained winds of 91 mph with a gust to 121 mph were reported on Block Island. Providence recorded sustained winds of 100 mph with a gust to 125 mph. Extensive damage occurred to roofs, trees and crops. Widespread power outages occurred, which in some areas lasted several weeks. In Connecticut, downed power lines resulted in catastrophic fires to sections of New London and Mystic. The lowest pressure at the time of landfall occurred on the south side of Long Island, at Bellport, where a reading of 27.94 inches was recorded. Other low pressures included 28.00 inches in Middletown, Connecticut and 28.04 inches in Hartford, Connecticut.

The hurricane produced storm tides of 14 to 18 feet across most of the Connecticut coast, with 18 to 25 foot tides from New London east to Cape Cod. The destructive power of the storm surge was felt throughout the coastal community. Narragansett Bay took the worst hit, where a storm surge of 12 to 15 feet destroyed most coastal homes, marinas and yacht clubs. Downtown Providence, Rhode Island was submerged under a storm tide of nearly 20 feet. Sections of Falmouth and New Bedford, Massachusetts were submerged under as much as 8 feet of water. All three locations had very rapid tides increased within 1.5 hours of the highest water mark.

Rainfall from this hurricane resulted in severe river flooding across sections of Massachusetts and Connecticut. Three to six inches fell across much of western Massachusetts and all but extreme eastern Connecticut. Considerably less rain occurred to the east across Rhode Island and the remainder of

Massachusetts. The rainfall from the hurricane added to the amounts that had occurred with a frontal system several days before the hurricane struck. The combined effects from the frontal system and the hurricane produced rainfall of 10 to 17 inches across most of the Connecticut River Valley. This resulted in some of the worst flooding ever recorded in this area. Roadways were washed away along with sections of the New York, New Haven, and Hartford Railroad lines. The Connecticut River, in Hartford reached a level of 35.4 feet, which was 19.4 feet above flood stage. Further upstream, in the vicinity of Springfield, Massachusetts, the river rose to 6 to 10 feet above flood stage, causing significant damage. A total of 8900 homes, cottages and buildings were destroyed, and over 15000 were damaged by the hurricane. The marine community was devastated. Over 2,600 boats were destroyed and over 3,300 damaged. Entire fleets were lost in marinas and yacht clubs along Narragansett Bay. The hurricane was responsible for **564 deaths and at least 1700 injuries** in southern New England. Damage to the fishing fleets in southern New England was catastrophic. A total of 2,605 vessels were destroyed, with 3,369 damaged.

HURRICANE CAROL

(**CAT 3** - August 31, 1954)

On the morning of August 31, Hurricane Carol, the most destructive hurricane to strike southern New England since the Great New England Hurricane of 1938, came crashing ashore near Old Saybrook, Connecticut, leaving 65 people dead in her wake. Carol had developed in the Bahamas several days earlier, making only slow progress northward. Carol began her rapid acceleration during the evening of August 30, while passing just east of Cape Hatteras, North Carolina. Carol made landfall on eastern Long Island and southeastern Connecticut about 12 hours later, moving at over 35 mph.

Sustained winds of 80 to 100 mph roared through the eastern half of Connecticut, all of Rhode Island, and most of eastern Massachusetts. Scores of trees and miles of power lines were blown down. Strong winds also devastated crops in the region. Nearly 40 percent of apple, corn, peach, and tomato crops were ruined from eastern Connecticut to Cape Cod. Several homes along the Rhode Island shore had roofs blown completely off due to winds which gusted to over 125 mph. The strongest wind ever recorded on Block Island, Rhode Island occurred during Carol when winds gusted to 135 mph. The National Weather Service in Warwick, Rhode Island recorded sustained winds of 90 mph, with a peak gust of 105 mph. Lowest recorded pressure was at Suffolk County Airport on the south shore of Long Island with a reading of 28.36. Block Island reported 28.51 while Quonset Airport in North Kingstown, Rhode Island reported 28.72.

Hurricane Carol arrived shortly after high tide, causing widespread tidal flooding. Storm surge levels ranged from 5 to 8 feet across the west shore of Connecticut, and from 10 to 15 feet from the New London area eastward. Storm tide profiles show, as in 1938, how dramatically the tides increased just before landfall across Narragansett Bay, the Somerset, Massachusetts area and in New Bedford, Massachusetts harbor. Narragansett Bay and New Bedford harbor received the largest surge values of over 14 feet in the upper reaches of both waterways. On Narragansett Bay, just north of the South Street Station site, the surge was recorded at 14.4 feet, surpassing that of the 1938 hurricane. However, since Hurricane Carol arrived after high tide, the resulting storm tide was lower.

Coastal communities from central Connecticut eastward were devastated. Entire coastal communities were nearly wiped out in New London, Groton, and Mystic, Connecticut, as well as from Westerly to Narragansett, Rhode Island. Once again, as in the 1938 hurricane, downtown Providence, Rhode Island was flooded under 12 feet of water. Rainfall amounts ranged from 2 to 5 inches across most of the area. The heaviest amounts, up to 6 inches, occurred in the New London, Connecticut area in the vicinity of landfall, and across extreme north central Massachusetts.

Hurricane Carol destroyed nearly 4000 homes, along with 3500 automobiles and over 3000 boats. All of Rhode Island, much of eastern Connecticut and much of eastern Massachusetts lost electrical power. In addition, as much as ninety-five percent of all phone power was interrupted in these locations.

HURRICANE EDNA

(**CAT 3** - September 11, 1954)

Following closely on the heels of Hurricane Carol was Hurricane Edna. Edna followed a track up the East Coast that was slightly east of Carol's track. Edna raced towards southern New England at over 45 mph, but veered about 100 miles further east. Edna made landfall during the morning of September 11, passing over Martha's Vineyard and Nantucket, then across the eastern tip of Cape Cod, Massachusetts.

Hurricane force winds of 75 to 95 mph buffeted all of eastern Massachusetts and coastal Rhode Island. Inland, sustained winds of 50 to 70 mph were common west of the Connecticut River Valley. Peak wind gusts included 120 mph on Martha's Vineyard, 110 mph on Block Island, and 100 mph at Hyannis, Massachusetts. The strong winds knocked out electrical power across sections of Rhode Island, eastern Massachusetts, and nearly all of Cape Cod and the Islands. The lowest recorded pressure was 28.02 inches at Edgartown on Martha's Vineyard. An unofficial pressure of 27.70 inches was recorded in Woods Hole, in Falmouth, Massachusetts, but this reading is believed to be in error based on the actual track of the storm center.

Edna arrived during a rising tide and resulted in severe flooding across Martha's Vineyard, Nantucket and Cape Cod, where storm surges of over 6 feet were common. Further west, storm surge values were 4 feet or less, resulting in storm tides that remained below flood stage. Damage to the boating community was severe across Cape Cod, but was much less across the remainder of Massachusetts and Rhode Island. Most of damage across extreme southeast Connecticut and Rhode Island occurred to locations that were left severely weakened by Carol.

Edna's track across the extreme eastern part of the region did result in heavy rainfall and inland flooding. Rainfall amounts of 3 to 6 inches were common, with over seven inches across northeastern Massachusetts. This rainfall aggravated the already saturated conditions caused by Hurricane Carol ten days earlier. The total combined rainfall for Carol and Edna ranged from 5 to 7 inches along and west of the Connecticut River and over Cape Cod, to as much as 11 inches from southeast Connecticut, across most of Rhode Island, to northeast Massachusetts. Considerable urban and small stream flooding occurred. Numerous street washouts were common, along with some major river flooding in Rhode Island and northeast Massachusetts, where rivers rose several feet above flood stage.

Edna was responsible for 21 deaths across the region.

HURRICANE BOB

(**CAT 2** - August 19, 1991)

Hurricane Bob developed in the central Bahamas on August 16, then steadily intensified and reached hurricane status on the evening of August 17. Bob continued to strengthen during the next 48 hours, as it began an acceleration north-northeastward, paralleling the East Coast. The eye of Hurricane Bob passed over Block Island, Rhode Island at approximately 1:30 PM, and made landfall over Newport, Rhode Island shortly before 2 PM.

Hurricane Bob brought sustained hurricane force winds to the immediate coastal communities of Rhode Island and most of southeast Massachusetts. Strong tropical storm force winds blew across the remainder of the region, with many areas receiving gusts to hurricane force east of the Connecticut River. Wind damage to trees and utility poles was common and resulted in numerous power outages. Over 60 percent of the residents across southeast Rhode Island and southeast Massachusetts lost power. Damage was also extensive to apple and peach orchards across these areas.

Coastal communities bore the brunt of the storm, with sustained winds between 75 to 100 mph. Peak wind gusts to 125 mph were recorded on Cape Cod in the towns of Brewster and North Truro, as well as in Wethersfield, Connecticut. The highest sustained wind of 100 mph, was recorded in North Truro. Block Island reported sustained winds of 90 mph, with gusts in excess of 105 mph (maximum speed of equipment). Wind gusts to near 100 mph were recorded in Newport and by the Navy Ship *Samuel B. Roberts*, which was riding out the storm on the east passage between Newport and Jamestown, Rhode Island. Additionally, there were four reports of tornadoes as Bob came ashore. The lowest

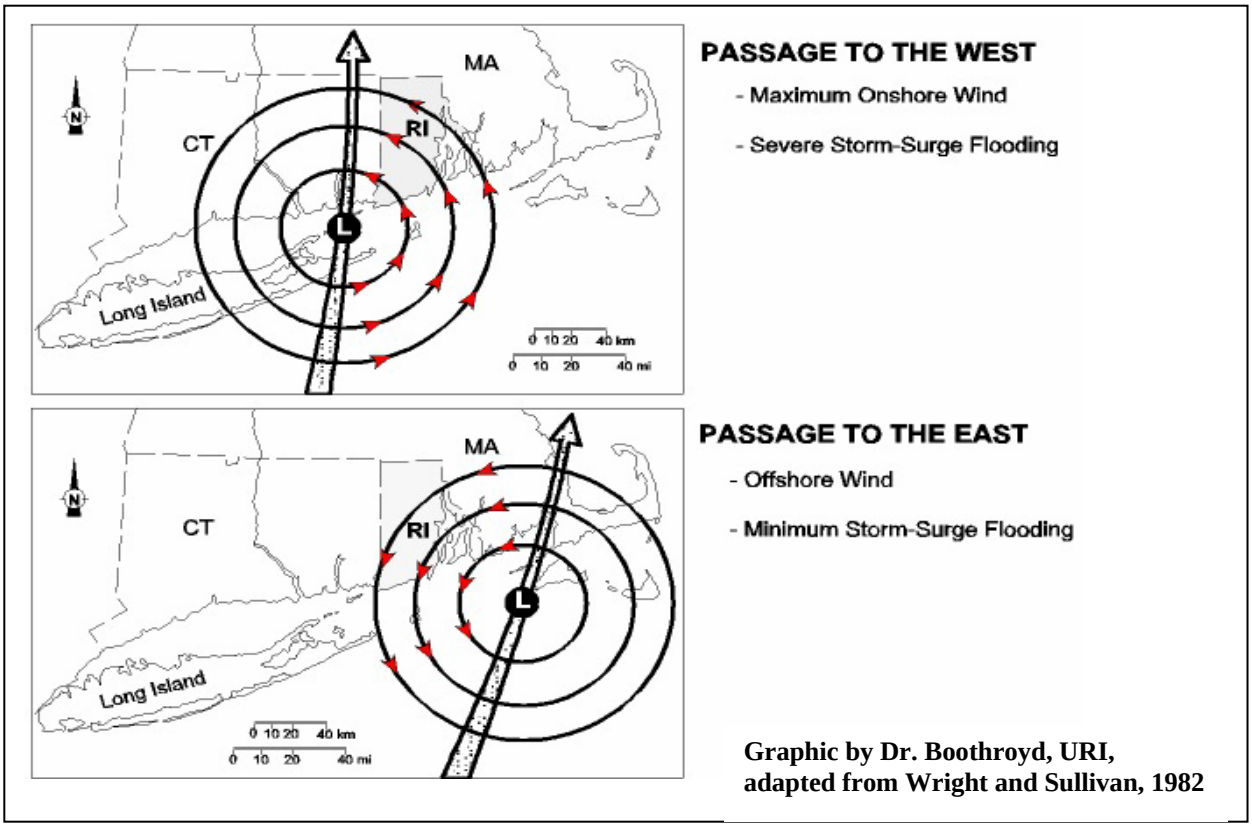
barometric pressure was recorded by the *USS Valdez* while in the east passage of Narragansett Bay, with a reading of 28.47 inches.

Hurricane Bob caused a storm surge of 5 to 8 feet along the Rhode Island shore, but drove a surge of 10 to 15 feet into Buzzards Bay. The Buzzards Bay shore east to Cape Cod was hardest hit. The highest surges, of 12 to 15 feet, were observed in Onset, Bourne, Mashpee and Wareham, at the head of Buzzards Bay. Cove Road, in Mattapoisett, Massachusetts had 29 of 37 homes destroyed, while Angelica Point, Massachusetts lost 32 of 35 homes along the shore. Boat damage was significant, as many boats were torn from their moorings. Extensive beach erosion occurred along the shore from Westerly, Rhode Island eastward. Some south facing beach locations on Martha's Vineyard and Nantucket Islands lost up to 50 feet of beach to erosion.

Significant rainfall of 3 to 6 inches fell across all but southeast Rhode Island and eastward to Cape Cod, where less than 1 inch fell. The heaviest rainfall of over 7 inches affected western Rhode Island and extreme eastern Connecticut. Foster, Rhode Island had the highest amount of rain with 7.01 inches.

Bob was responsible for six deaths in the region, all in Connecticut. Total damage in southern New England was approximately 680 million dollars.

H. Hurricane and Extratropical Storm Path Severity in RI and Southeastern MA.



The above illustration shows the path and associated wind patterns of hurricanes that come onshore in southern New England. When the eye of a hurricane passes to the west of Rhode Island, the wind blows onshore along the south shore barriers and headlands. This is the most destructive path because the wind moving across Rhode Island coastline has the combined velocity of the wind circulating around the eye plus the velocity of the storm system as it moves onshore.

When the eye of the hurricane passes to the east of Rhode Island, winds along the south shore blow offshore and at relatively slower velocity because the velocity of the storm system is subtracted from the velocity of the circulating winds. Thus the south shore of western Rhode Island is spared the full brunt of the storm, but southeastern Massachusetts shoreline receives the maximum winds, waves, and storm surge. *Rhode Island Coastal Resources Management Council, Coastal Feature, Volume 9, Issue 4, Summer 2001*

CHAPTER 2 – UNIT PLANNING AND PREPAREDNESS

A. Organization.

1. Response Structure (ICS/UCS).

a. General. The Incident Command System (ICS) and Unified Command System (UCS) under National Interagency Incident Management System (NIIMS) are established management systems that will be utilized during severe weather such as hurricanes to assist MSO Providence personnel in the preparation and aftermath of a passing hurricane. The severity of damage from a hurricane strike in the Providence area will typically determine whether the Incident Command System (ICS) and/or the Unified Command System (UCS) will be used.

b. Incident Command System. The Incident Command System (ICS) is a management tool utilized in response to a routine emergency or when managing a major response to a disaster. ICS is built around five major management activities: Command, Operations, Planning, Logistics and Finance. In the preparation for and aftermath of a hurricane, the COTP may activate the ICS at MSO Providence in response to an emergency or potential emergency within the Providence AOR. The COTP would assume the role as the Incident Commander and the five main ICS Sections would be adjusted to meet the needs of the incident. The unit watch, quarter, and station bill (ICS structure) is provided in Annex A.

c. Unified Command System. The Unified Command System (UCS) is a response effort involving numerous federal, state, and local agencies, with overlapping jurisdictional boundaries or limited functional responsibilities, working together to establish a common set of incident objectives and strategies in response to a large scale disaster. This is accomplished without losing or renouncing agency authority, responsibility, or accountability. There are usually four elements to consider in applying a Unified Command: policy objective strategies, organization, resources and operations. Since severe weather, such as the passing of a hurricane, can be devastating to marine industry and the boating public, it is essential for federal, state and local agencies to work together under the UCS to minimize the potential damage and expedite restoration efforts. If the AOR is severely impacted by severe weather, the Coast Guard would actively participate in the post-storm assessment, recovery and response efforts as a member of the UCS. The UCS command post would most likely be located at one or both of the state EMA Emergency Operation Centers (EOCs) (RI or MA). The response to a significant or major pollution incident may be coordinated from another location, e.g., MSO Providence, NAVSTA Newport or Airsta Cape Cod, while maintaining adequate representation at the state EOC. Under agreement with MSO Boston, their pre and post-storm representative to the MEMA bunker in Framingham, MA will liaison with MSO Providence for any COTP issues affecting Providence's AOR. MSO Providence will send a pre and post-storm representative to the RIEMA EOC to liaison with the command.

B. Personnel Resources.

1 Personnel Concerns. Following the setting of hurricane port condition X-RAY (D1 OPLAN condition 3), the COTP may activate the severe weather watch, quarter and station bill or portions of the bill as needed. To expedite unit and port preparations, unit personnel on leave, special liberty or during after hours may be recalled.

2. Reserve Augmentation.

a. Method of Employment. To effectively continue operational missions when facing natural disasters, the COTP may obtain the services of members of the Ready Reserve through Active Duty Other Than Training (ADOT). ADOT is a tour of Involuntary Active Duty, Voluntary Active Duty for Emergency Operations or Active Duty for Special Work (ADSW). Reservists in the Individual Ready Reserve (IRR) or the Standby Reserve (Active Status) will perform this duty. The Manpower Mobilization and Support Plan, COMDTINST M3061.1, is the reference used to identify reserve issues in this severe weather plan. Voluntary authority will normally not be used simultaneously with involuntary authority for the same emergency. Once involuntary authority has been granted for a specific emergency, reservists should be ordered to active duty under the involuntary authority. However, members recalled involuntarily may stay on active duty as volunteers after their 30-day limit, if this would eliminate the need to involuntarily recall other reservists. In such cases, the 30-day limit on voluntary recall is waived.

b. Involuntary Active Duty. Involuntary Active Duty is a tour of active duty for domestic emergencies. Authority for this type of recall is established under 14 U.S.C. 712. The authority to recall Ready Reserves is 10 U.S.C. 12301 and 12302. The authority to recall Selected Reserves is the Ready Reserve authority as well as 10 U.S.C. 12304, also known as Presidential Selected Reserve Call-up. The authority to recall the Standby Reserves is 10 U.S.C. 12306 (formerly 10 U.S.C. 674). A domestic emergency is defined as a serious natural or man-made disaster, accident, or catastrophe. It does not count against Coast Guard full time equivalent (FTE). The President or the Secretary of Transportation initiates these recalls for not more than 30 days in any 4 month period, and not more than 60 days within a 24 month period.

c. Voluntary Active Duty for Emergency Operations. Voluntary Active Duty for Emergency Operations is duty under 10 U.S.C. 12301(d), which is not funded by the unit. District commanders are delegated the authority to recall reservists to active duty (other than for training) with their consent. Any one district for any one emergency may use a maximum of 300 officer days and 3,000 enlisted days. Under this authority, a maximum of 10 officers and 100 enlisted members may be on active duty at any one time, and individual reservists may not serve for more than 30 days. Commandant (G-CCS) may authorize additional voluntary personnel and/or days.

d. Partial Mobilization. Authority for this type of recall is established under 10 U.S.C. 12302 (formerly 10 U.S.C. 673). Following a declaration of national emergency by the President, up to 1 million members of the Ready Reserve may be recalled without their consent for not more than 24 months. (The Joint Chief of Staff will determine Coast Guard portion at the time of the emergency).

e. Active Duty for Special Work in support of the Active Component (ADSW-AC). ADSW-AC is a tour of Active Duty other than Extended Active Duty (EAD) to provide support for Coast Guard missions. This includes duty formerly referred to as TEMAC (Temporary Active Duty). (see COMDTINST 1330 (series)).

3. Communications with Reserve Members. During natural disaster and emergency situations, communications are often seriously impaired or lost completely. To facilitate rapid response at the local level, the Captain of the Port shall:

a. Establish direct communications with the unit's reserve personnel both before (if possible) and after the onset of the emergency.

b. Test notification and recall procedures at the beginning of hurricane season and again when a hurricane watch is issued for the MSO Providence AOR.

4. Conditions of Reserve Augmentation.

a. Reserve Authority. Reservists ordered to ADT (including ADT as defined by 10 U.S.C. 101) or IDT are vested with the same power, authority, rights, and privileges in the execution of their duties as the members of the regular Coast Guard (14 U.S.C. 704, 14 U.S.C. 754, and 33 CFR 8).

b. Use of Reserves. Reservists may be used as available whenever it has been determined that insufficient active duty personnel are available to handle the emergency, and may be retained on duty only until the emergency has been resolved or they can be replaced by redeployment of active duty personnel.

c. Orders. Written orders for voluntary emergency active duty must be issued in all cases. When reservists are used on a voluntary basis for emergency augmentation outside their home district, the gaining (affected) district will provide the accounting data to be used by the reservist's home district in processing the reservist's orders. If emergency conditions necessitate the issuance of verbal orders, written orders shall follow as soon as practicable. When reservists are already serving on active duty, any extensions beyond the normal expiration date/time of their orders require the issuance of new orders and voluntary acceptance by the reservist.

d. Procedures: Upon the occurrence or the firm prediction of a domestic emergency, and the determination by the COTP that a recall of Ready Reservists will enhance the response operation, the following action will be taken.

(1) Requests for the augmentation of district units should go through the chain of command to the district commander. District commanders will coordinate all requests for reserve personnel within their district and then submit a combined request by message to their respective area commander with info copy to their MLC (p).

1. The message requests should contain:

a. The number of reservists, officer and enlisted, required (specify ranks, designators, rates, and ratings, if critical) and duration of duty.

b. The tasks to be assigned and their locations.

c. The required reporting date (normally to be within 48 hours of the initial receipt of call-up orders).

d. If dictated by the situation, a request for authority to accelerate time of reporting.

e. Estimated total costs of pay and allowances, including contractual subsistence and lodging or per diem where appropriate, and travel, including costs necessary to the reservists' return home upon completion of duty.

(2) The affected district commander will coordinate the issuance of orders with the appropriate ISC. If reserve personnel from outside the affected district are required, the district commander may request outside district support via the area commander.

5. Reserve Limitations. MSO Providence is routinely augmented by reserves for a full integration of marine safety missions. However, the use of reservists during any prior or post-hurricane operation may be limited because local government, law enforcement, and EMS agencies currently employ numerous reserves. Coast Guard Reserves would normally be expected to fulfill their primary response/emergency obligation before they assist MSO Providence.

6. Coast Guard Auxiliary.

a. General. The auxiliary is the all-volunteer civilian component of the Coast Guard. In contrast to active duty and reserves, the auxiliary is specifically declared by statute to be "non-military," which defines the auxiliary's role as entirely within the sphere of the Coast Guard's civil functions, not extending to any military or law enforcement responsibilities of the service. Details of the auxiliary are contained in the Auxiliary Manual, COMDTINST M16790.1c. Auxiliary afloat resources are available by contacting Coast Guard Group Woods Hole Auxiliary Liaison Officer (AUXLO) or the Division Captain (DCP) responsible for a given area of responsibility. Shore based resources are available through the MSO Providence Auxiliary Liaison Officer (AUXLO).

b. Operations. Auxiliary operations cover the activities of the members and the use of their personally owned Operational Facilities (AUXOPFAC). Details of the operations program are contained in the Auxiliary Operations Policy Manual, COMDTINST M16798.3, and the Auxiliary Air Operations Manual, COMDTINST M16798.5. Auxiliary forces should be available for a certain period of time before the onset of severe weather. However, given the civilian nature of the organization, expect that the auxiliary forces will need to be removed from service and depart for safe harbor before CG forces because they will be in "competition" with the general boating populace for safe moorings. AUXOPFACs would be returned to service as soon as possible after the storm but access to local areas and waterways and the extent of hurricane damage may limit post-hurricane operations. MSO Providence may ask the auxiliary for support to conduct port surveys and security patrols, etc. within the port and in the more remote areas within the COTP zone via vessel and private conveyances.

c. Auxiliary Facility Resources.

(1) Personnel. Auxiliarists may be utilized in a wide variety of administrative, logistical, technical, and operational roles. Consideration must be given to ensure that they are not exposed to any hazardous or unhealthy conditions; they may not be used in law enforcement roles. A listing of auxiliary personnel currently assisting MSO missions may be obtained by contacting the MSO Providence AUXLO. An operational personnel roster with individual qualifications and auxiliary numbers is required to be submitted to the District, Group, and Stations by 15 February of each year.

(2) Vessels. Privately owned AUXOPFAC vessels, manned by certified crews, perform search and rescue missions, safety, regatta, aids to navigation, pollution, and harbor patrols. A current

list of auxiliary facilities with owner's names and contact numbers is required to be submitted to the District, Group, and Stations by 28 February of each year. This report should also indicate which vessels have a non-owner certificate of authorization to operate on file. This report requires the berthing or mooring location of all facilities. Vessel fact sheets must also be provided on all facilities by the same date. MSO Providence currently utilizes AUXOPFACs on day and night harbor patrols. Vessels manned by local auxiliarists are thoroughly familiar with MSO Providence's local AOR.

(3) Aircraft. Privately owned AUXOPFAC aircraft, manned by certified pilots and air observers, fly search and rescue missions, safety, aids to navigation, maritime domain awareness, logistic, and pollution patrols. All requests for auxiliary aircraft must be coordinated with Air Station Cape Cod.

(4) Vehicles. There are several vehicles within the Providence AOR certified as AUXOPFACS. These resources are equipped with marine VHF-FM radios and are available for personnel transportation, logistical, administrative, and observing/reporting missions. Most vehicles are sedans; however, there are a limited number of recreational vehicles (RVs). Most, if not all, RVs would be unavailable during the preparatory stages, as they would be driven from the area to be used as shelter. Upon return to the area, RVs could become a valuable resource when used as an on scene mobile command post. Private conveyances may be utilized to conduct port survey patrols up to the hurricane port condition X-RAY (D1 OPLAN condition 3) and for post-hurricane operations. However, given the civilian nature of the organization, expect that the auxiliary forces will need to be removed from service and depart for safety. Private conveyances would be returned to service as soon as possible after the storm but access to local areas and the extent of hurricane damage may limit post-hurricane operations.

(5) Communications. A number of Auxiliary Flotillas own and operate land-based radio stations within their own buildings or spaces. Radio bases are equipped with marine VHF-FM radios, radio direction finding equipment, telephone landlines, and in some cases SSB and CB radios. Smaller stations, without RDF equipment, are installed in some members' residences. Flotilla radio stations normally are located near the water and would be inoperative during a hurricane. Stations located in members' residences might be in service, provided they have not been evacuated. The primary frequency used by all AUXOPFACs is Channel 83A, although all Coast Guard frequencies are available. The SO-CM is requested to provide the SO-OP a listing of all communication facilities within their Division AOR by 28 February of each year.

(6) Auxiliary Orders. Auxiliarists receive official written orders from their order issuing authority. Normally this is CG Group Woods Hole. Issuance of orders may vary from unit to unit, but are "pre-approved" in the immediate Group Woods Hole area. Auxiliarists are reimbursed for rations and fuel expended. Auxiliary members must submit their travel claims on CG Form 1164 for reimbursement. Members assigned to duty by competent Coast Guard authority are entitled to the same injury and death benefits provided members of the reserve. Members who incur physical injury or contract sickness or disease while performing any specific duty shall be entitled to the same hospital treatment afforded members of the Coast Guard. The performance of specific duty includes time engaged in traveling to and from the place of assigned duty and the auxiliarist's residence.

C. Unit Preparedness

1. Purpose. All MSO Providence personnel are essential to successful pre-storm preparations. The check lists contained in this chapter outline actions that are necessary to ensure the safety of unit personnel, Coast Guard buildings, property and equipment, and the port community.

D. Severe Weather Conditions.

1. Severe weather comes in many forms (significant snow storm, nor'easter, sustained gale force winds over a period of time, storm condition wind, etc.). Annex L provides guidance on how to minimize damage to personnel, vessels, facilities and the environment once notified of forecasted severe weather.

E. Hurricane Conditions.

1. Specifically for hurricane preparedness, personnel **must begin tracking any named storm located in the vicinity of the Bahama Islands**. Storms that originate in the Bahamas have been known to catch persons "off guard". The rapid speed of advance makes it imperative to **begin preparations early** (at least begin discussions). The following New England historical storm data clearly establishes the need to plan early.

a. Average forward speed on hurricanes making landfall is 33 mph.

b. The 1938 category 3 hurricane made the trip from Cape Hatteras, NC to landfall in Rhode Island in eight hours.

c. Substantial rain can begin 15 hours in advance of the eye of the storm.

d. Average duration of tropical storm force winds is 12 hours; 3 to 6 hours for hurricane force winds.

e. Rainfall of 6 to 10 inches is common on the west side of the track; less than 2 inches on the east side.

f. Coastal flooding can occur as much as 6 hours before the eye comes ashore.

g. Storm surges of 12 to 15 feet have been seen before; worst case scenario storms "could" produce 20 to 30 feet.

h. The outer Cape can usually expect 10 to 12 foot storm surge.

i. Maximum flooding will occur on the Cape approximately 1.5 hours after the eye passes.

j. The 48 hour storm track forecast accuracy is approximately 200 miles (usually north/south error due to speed of advance; however, don't rule out east/west errors).

k. The 12 hour storm track forecast accuracy is approximately 40 to 50 miles.

2. Tropical disturbances are potentially dangerous and may develop easily into tropical depressions, tropical storms, or hurricanes on short notice. To help offset this short notice, the district commander may order a hurricane/tropical storm condition to be set for a specified area. Official weather service advisories will guide the setting of port conditions WHISKEY, X-RAY, YANKEE, and ZULU. Figure

1 shows the comparison of D1 OPLAN conditions and LANTAREA port conditions. The following conditions are established for the purposes of alerting and establishing conditions of readiness for units within the First Coast Guard District:

a. PORT CONDITION WHISKEY (72-HOUR ALERT). The alert condition in which hurricane force winds are possible within 72 hours (D1 OPLAN condition 4).

b. PORT CONDITION X-RAY (48-HOUR WATCH). The readiness condition in which hurricane force winds are possible within 48 hours (D1 OPLAN condition 3). This corresponds to the National Hurricane Center advisory: **Hurricane Watch**.

c. PORT CONDITION YANKEE (24-HOUR WARNING). The WARNING condition in which hurricane force winds are expected within 24 hours (D1 OPLAN condition 2). This corresponds to the National Hurricane Center advisory: **Hurricane Warning**.

d. PORT CONDITION ZULU. The DANGER-MAXIMUM PREPAREDNESS condition in which hurricane force winds will likely strike COTP zone within 12 hours (D1 OPLAN condition 1).

e. POST HURRICANE CONDITION. The storm has passed and is no longer a threat to the area.

f. SECURE HURRICANE CONDITION. The storm has passed, dissipated or changed course and is no longer a threat to the area. **(no reports are required)**.

Figure 1

LANTAREAINST 16601	**D1 OPLAN 9710-95**
HURRICANE PORT CONDITION ***WHISKEY***	CONDITION 4
HURRICANE PORT CONDITION ***X-RAY***	CONDITION 3
HURRICANE PORT CONDITION ***YANKEE***	CONDITION 2
HURRICANE PORT CONDITION ***ZULU***	CONDITION 1

3. All First District units will be directed to set hurricane conditions by message. FOR EXAMPLE: "Set hurricane/tropical storm condition 3 from Shark River Inlet, New Jersey North to and including Plymouth, Massachusetts." Units must send “Attainment Messages” once the required actions for hurricane port condition YANKEE and ZULU (condition 2 and 1) have been completed (see Annex D for message templates).

4. Evacuation. MSO Providence’s unit evacuation will occur only if directed by the commanding officer. The MSO main office and the Cape Cod Field Office are a sufficient distance from the water and not located within a flood plain. The New Bedford Field Office is the only unit facility at risk of storm surge flooding and **must** be evacuated prior to the closing of the New Bedford Hurricane Barrier by the U.S. Army Corps of Engineers. Even if the New Bedford Hurricane Barrier remains open, the Field Office shall be evacuated no later than the setting of hurricane port condition ZULU.

a. Evacuation Orders. In certain circumstances, it may be necessary for the Coast Guard to evacuate family members from their homes to an area of safe refuge. An evacuation may result from unusual or emergency circumstances such as war, riots, civil uprising or unrest, national or natural disasters, epidemics, or similar conditions of comparable magnitude. In the Northeast, it is most probable that an evacuation might be ordered for protection from a hurricane or an approaching winter storm. In

the event of an evacuation, the Coast Guard permits dependents of Coast Guard employees to receive reimbursement for travel, food, and lodging expenses incurred while the evacuation order is in effect. Funded evacuation authorizations may be granted by the Area, District, MLC commanders, or designated representatives when advised by a national or local emergency management authority to do so. The authorizing unit determines whether a limited or full evacuation is required.

(1) A ***full evacuation*** is defined as the movement of dependents from the impacted area to an area of safe refuge. It is primarily used when geographic areas expect to suffer extraordinary storm damage. A ***limited evacuation*** is the authorized movement of dependents from their residences to the nearest available accommodation and is used for the temporary avoidance of severe weather.

(2) In either case, upon ordering an evacuation the authorizing official must designate a certain locality as a safe haven and provide both an effective date to begin the evacuation and its estimated duration. The Commanding Officer of MSO Providence does have the authority to approve alternate safe haven locations. However, personnel who evacuate dependents to a location other than the safe haven designated by the authorizing official should understand that they will only receive reimbursement at the published Per Diem rate for the designated safe haven site.

(3) In most circumstances, members and their dependents will need to cover expenses using their own personal funds and make their own lodging reservations, although members with government travel cards are authorized to use them to secure lodging. Evacuation entitlements for dependent travel expenses are reimbursable by filing a claim with the authorizing unit. A member's PDS will produce evacuation travel orders using TONOs and an accounting string generated by the authorizing unit. Although evacuation entitlements apply only to dependents, a unit may use its own AFC-30 account reimburse active duty personnel for evacuation expenses. Additional guidance can be found in Chapter 6 of the Joint Federal Travel Regulations or by consulting the following intranet web link: http://www.uscg.mil/hq/psc/evac.shtm.

(4) To minimize potential travel claim complications, evacuation travel orders should include the name of the authorizing authority, reason for evacuation, date of the evacuation, date when the evacuation was terminated, designated safe haven (state, city, county), list of dependents authorized travel and transportation entitlements (names, relationship to sponsor, dates of birth), and authorized mode of travel. Claimants are also required to provide receipts for expenses of $75 and greater and for lodging in any amount. Receipts for meals, food, misc., are not required in lieu of the meals and incidental expenses Per Diem allowed.

5. Procedures.

a. Prior to hurricane season, MSO Providence shall engage facility and vessel owners and operators in discussions to outline industry responsibilities and the COTP's plan of action during the approach of a hurricane or severe weather.

b. As a hurricane force storm approaches, the COTP shall actively stay abreast of the status of activity in the port, and obtain information on actions taken, planned, or being considered. The Port Safety Team provides an appropriate forum for communicating with members of the port community. The COTP shall also communicate with neighboring COTPs to coordinate actions and vessel movement plans.

c. As part of the storm preparation process, the COTP shall issue periodic notices to the port area in advance of the storm. These notices shall be in the form of a Broadcast Notice to Mariners (see Annex E), and are intended to communicate the status of the port, including establishment of safety zones, and to remind all members of the port community of their responsibilities and requirements to prepare for the storm. Typically, Broadcast Notices to Mariners shall be issued 72 hours, 48 hours, 24 hours and 12 hours in advance of the estimated arrival of gale force winds. Additional notices, bulletins, or other outreach methods may be sent by the COTP as local circumstances or significant developments require.

d. All COTPs within Atlantic Area shall use the following standard terms and actions for setting hurricane port conditions. The intent of this standardization is to relate a specific port status to a specific port condition. Additional actions to address port-specific safety concerns may be added to address local requirements, but shall not detract from the actions and requirements herein.

(1) Port Condition WHISKEY (set when gale force winds from a hurricane force storm are expected to arrive at the port within 72 hours).

a. Port Status: open to all commercial traffic.

b. Establish a safety zone that requires:

i. All self-propelled oceangoing vessels over 200 GT and all oceangoing barges and their supporting tugs to report their intention to depart or remain in port.

ii. All self-propelled oceangoing vessels over 200 GT and all oceangoing barges and their supporting tugs remaining in port to complete a REMAINING IN PORT CHECKLIST (see Annex H) and submit to the COTP within 24 hours for approval.

c. Advise port of intentions for setting next port condition (X-RAY).

(2) Port Condition X-RAY (normally set when gale force winds from a hurricane force storm are expected to arrive at the port within 48 hours).

a. Port status: open to all commercial traffic.

b. All REMAINING IN PORT CHECKLISTs submitted to the COTP for approval.

c. Individually assess vessels desiring to remain in port, issue COTP Orders as appropriate.

d. Advise port of intentions for setting next port condition (YANKEE) including degree of vessel control.

(3) Port Condition YANKEE (normally set when gale force winds from a hurricane force storm are expected to arrive at the port within 24 hours and as soon as practical after the storm passes).

a. Port Status: vessel traffic control measures in effect. No inbound vessel traffic.

b. Establish a safety zone controlling vessel movements and activities as appropriate.

c. COTP approve or direct, as necessary, final mooring arrangements for vessels remaining in port.

(4) Port Condition ZULU (normally set when gale force winds from a hurricane force storm are expected to arrive at the port within 12 hours).

a. Port Status: closed to all vessel traffic except for vessel movements and activities specifically authorized by the COTP.

b. Establish a safety zone prohibiting vessel movement and activities.

c. Once the hurricane or severe weather passes, except for search and rescue and pollution response, the focus of Atlantic Area resources shall be the restoration of commercial operations within the port. The COTP shall determine the priority for reopening channels and waterways. As a first step toward achieving normal hurricane season port status, the COTP should, as soon as practical, set port condition YANKEE, (i.e., vessel traffic control measures in effect), opening commercial shipping channels with appropriate limitations as each channel or waterway is surveyed and deemed suitable for transportation.

F. MSO Providence Severe Weather Preparedness Checklist.

1. The following specific guidance is organized and based upon a set hurricane port condition. It is chronologically arranged, but some actions may be completed simultaneously. Many of the actions specified in the unit check lists are "prerequisites" and must be completed first in order to later initiate corresponding actions required of port and marine interests. Readiness conditions set by CCGD1 for Coast Guard units are separate and distinct from readiness conditions established for ports and the maritime community by COTP Providence. Readiness conditions for ports and the maritime community will be based on reports received from the National Weather Service or other weather sources and pertains to the probability and timing for gale force winds to reach areas within the COTP zone. **Any of the following items can be utilized, as needed, during any forecasted severe weather condition, e.g., small craft advisory, gale warnings or storm conditions.** In addition to the requirements listed in Tab X to Appendix 21 to Annex C to the CCGDONE OPLAN 9710-95, the following guidelines are provided for unit personnel.

Command
(Primary Responsible Person: XO)

	All hands become familiar with the Severe WX Plan. Ensure all Department Heads and Field Office Supervisors have reviewed this Plan and that necessary updates/corrections are made prior to May 14.
	Send letter to all personnel/dependents (attach Annex J) by June 1.

Planning
(Primary Responsible Person: Chief, Security & Response Planning)

	Review and update this Plan and ensure the currency of appropriate references prior to June 1st. Ensure updates provided to all plan-holders (see the Distribution List at bottom of cover letter).
	Determine to what extent MSO Providence will participate in annual Navy Hurricane Exercise and employ any lessons learned (usually held in April or May).
	Host meeting with maritime community in early June to discuss actions necessary to minimize property damage and pollution risks associated with tropical cyclones (can be Port Safety Committee meeting subject or topic).
	Send Seasonal Alert Status message to D1 on June 1 (sample in Annex B).
	Issue Marine Safety Information Bulletin (MSIB) no later than June 30 to notify the maritime community that hurricane season has commenced (not individual storm MSIBs).
	Begin tracking and discussing any named storms in the Bahamas. Don't wait for "official" warning and/or setting of conditions from NWS or D1. Engage NWS early/often.

Operations
(Primary Responsible Person: Chief, Operations)

	Coordinate with unit MAA to ensure that emergency generator has been tested under load.

Finance/Logistics
(Primary Person Responsible: Chief, Admin)

	Ensure unit contact database is current (active, reserve and auxiliary). Test notification and recall procedures.
	Inventory and replenish hurricane provisions as necessary. Identify funding source for the purchase of potable water. Review ordering procedures to procure MREs from national stock system.

Command
(Primary Responsible Person: XO)

	Ensure that all PRE HURRICANE SEASON CHECKS requirements have been completed.
	Review actions for PORT CONDITIONS X-RAY, YANKEE, and ZULU.
	Assign personnel to the Watch, Quarter and Station Bill (WQSB).
	Specify recall, liberty and leave policy.
	Identify need for full or limited evacuation early-on (prior to mass evacuation of population if possible). See chapter 2 for guidance. (use of AFC-30 funds?)

Planning
(Primary Responsible Person: Chief, Security & Response Planning)

	Ensure that all actions required by PRE HURRICANE SEASON CHECKS have been completed.
	Review actions for PORT CONDITIONS X-RAY, YANKEE, and ZULU.
	Ensure all Department Heads and Field Office Supervisors are aware of hurricane condition (all hands brief or via e-mail).
	Ensure PORT CONDITION WHISKEY broadcast is drafted and sent (CGMS and email/fax distribution) to advise port community of changing readiness condition (see BNM samples contained in Annex E).
	Commence storm plot using hurricane status board in conference room. Use internet to access the National Hurricane Center (NHC) and National Weather Service (NWS) for most recent storm information. NWS: http://www.nws.noaa.gov/ National Hurricane Center: http://www.nhc.noaa.gov
	Contact Rhode Island Emergency Management Agency to discuss MSO representatives at the state EOC and the coordination of post-storm response activities.
	Prepare ICS organization chart.
	Prepare pre and post storm watchlists.

Operations
(Primary Responsible Person: Chief, Operations)

	Ensure that all requirements of PRE HURRICANE SEASON CHECKS have been completed.
	Review actions for PORT CONDITIONS X-RAY, YANKEE, and ZULU.
	Consider possibility of pre-positioning unit vehicles, with full tank of gas, for post-storm activities. Determine where team vehicles and hand-held communications equipment will be staged for post-storm response (see page 2-21).
	Review procedures for securing of unit spaces and for removing computer equipment to safe locations away from windows. (field offices assist)
	Verify the location and status of all response trailers. Consider moving unprotected trailers to safe locations. (field offices assist)
	Ensure all waterfront facilities, lay-up facilities and shipyards are prepared for hurricane force winds and storm surge flooding. (field offices assist)
	Assign and brief harbor patrol teams; commence harbor patrols of AOR. (field offices assist)
	Compile list of all significant discrepancies found and intended corrective actions. (field offices assist)
	Determine the status of all communications equipment. Ensure portable equipment is fully charged and operational. (Develop distribution list) (field offices assist)
	Develop communications plan.

Operations (Continued)

	Contact the U.S. Army Corps of Engineers (ACOE). Request they inform us once closure times for Providence, New Bedford Hurricane Barriers and Cape Cod Canal are determined. (field offices report on barriers within your zone)
	Review procedures to backup all Automated Information System (AIS) files and store backup media in waterproof container.

Prevention

(Primary Responsible Person: Chief, Prevention)

	Ensure that all requirements of PRE HURRICANE SEASON CHECKS have been completed.
	Review actions for PORT CONDITIONS X-RAY, YANKEE, and ZULU.
	Vessels greater than 200 GT to submit lay up plans. Ensure all masters and agents know the port will be closed to inbound traffic upon setting of Port Condition YANKEE and the port will be completely closed upon setting of Port Condition ZULU. Obtain information regarding cargoes aboard and status of ground tackle. Encourage ocean-going vessels to clear the port when cargo operations have been completed. (field offices assist)
	Compile list of all significant discrepancies found and intended corrective actions. (field offices assist)

Finance/Logistics

(Primary Person Responsible: Chief, Admin)

	Ensure that all actions required by PRE HURRICANE SEASON CHECKS have been completed.
	Review actions for PORT CONDITIONS X-RAY, YANKEE, and ZULU.
	Prepare Excel spreadsheet to account for status of all unit personnel.
	Update list of reservists available for voluntary recall - include qualifications and point of contact for recall during or after storm. Review guidance for voluntary and involuntary recall of reserve personnel. Admin, as directed by the command, shall contact D1(a) to request reservists needed for recall. D1(a) will coordinate with ISC Boston (pf) to activate recall (nature of recall will direct who will fund it).
	Meet with command to discuss/specify leave & liberty policy.
	Inventory and restock all emergency rations, drinking water, equipment, and supplies to ensure all necessary provisions for prolonged watch standing in MSO and Field Offices are available. Assemble a four-day supply if hurricane is predicted to be category 3 or higher.
	Ensure personnel reporting for duty are prepared for severe weather and long hours. Advise personnel to bring rain gear, extra clothing and other personal items.

Command
(Primary Responsible Person: XO)

	Ensure that all actions required for PORT CONDITION WHISKEY have been completed.
	Review actions for PORT CONDITIONS YANKEE and ZULU.

Planning
(Primary Responsible Person: Chief, Security & Response Planning)

	Ensure that all actions required by PORT CONDITION WHISKEY have been completed.
	Review actions for PORT CONDITIONS YANKEE and ZULU.
	Use list of available personnel to finalize duties (including MSO representatives for RIEMA – pre and post-storm).
	Discuss comms with MSO Boston and GWH. Ensure MSO Boston person dispatched to MEMA has all unit contact information (they will be our link to storm activity in MA).
	Initiate situation briefings coordinated with periodic National Hurricane Center and NWS storm updates - usually every four hours.
	Make preparations for evacuation of MSO if necessary for the safety of watch personnel. Review procedures for evacuation of MSFO New Bedford. Note: MSFO New Bedford must be evacuated no later than setting PORT CONDITION ZULU.
	Establish 2 hour recall list of personnel identified as essential to attain PORT CONDITIONS YANKEE and ZULU.
	Prepare PORT CONDITION YANKEE (Hurricane Condition 2) attainment message. (See Annex D)
	Ensure PORT CONDITION X-RAY broadcast is drafted and sent (CGMS and email/fax distribution) to advise port community of changing readiness condition (see BNM samples contained in Annex E).

Operations
(Primary Responsible Person: Chief, Operations)

	Ensure that all actions required by PORT CONDITION WHISKEY have been completed.
	Review actions for PORT CONDITIONS YANKEE and ZULU.
	Contact local towing companies, develop list of tugs available for use in an emergency, obtain points of contact, and maintain status board or spreadsheet in conference room or alternate command post.
	Contact all facilities and agents (field offices assist), advise them of hurricane condition and reconfirm status and intentions of vessels and facilities. Update spreadsheet.
	Ensure all unit vehicles have been equipped with emergency provisions including flashlights, batteries, water, etc. (field offices assist)
	Continue harbor patrols as necessary. Inspect vessel moorings and identify potential missile hazards. Ensure discrepancies are reported to responsible parties. (field offices assist)
	Remove computer equipment to safe locations away from windows. (field offices assist)
	Backup all Automated Information System (AIS) files and store backup media in waterproof container. (field offices assist)
	Notify Group Woods Hole of MSO plans for 24-hour manning no later than attainment of PORT CONDITION ZULU.
	Check status of bridge and highway closures.
	Rhode Island Turnpike and Bridge Authority: (401) 423-0800 http://www.dot.state.ri.us/Webritba/index.htm Newport (Pell) Bridge Jamestown (Verrazano) Bridge Mount Hope Bridge Tiverton Route 24 Bridge Washington Street Bridge

Operations (Continued)

	MassHighway: (508) 824-6633 http://www.state.ma.us/mhd/ Braga Bridge Fairhaven Bridge
	Army Corps of Engineers (508) 749-4431 (ext 11) Bourne Bridge Sagamore Bridge

Prevention

(Primary Responsible Person: Chief, Prevention)

	Ensure that all actions required by PORT CONDITION WHISKEY have been completed.
	Review actions for PORT CONDITIONS YANKEE and ZULU.
	Contact Naval Station Newport, Fleet Liaison (401) 841-2277, to determine if any naval vessels are requesting permission to anchor in Narragansett Bay.
	Contact the Cape Cod Canal Control and the perspective barge/towboat company; determine if any barges are bound for or passing through the Providence AOR. Inform them that the COTP may close the port 12 hours prior to storm arrival.
	Inbound traffic must be capable of being completely secured at mooring prior to the projected onset of PORT CONDITION ZULU.

Finance/Logistics

(Primary Person Responsible: Chief, Admin)

	Ensure that all actions required by PORT CONDITION WHISKEY have been completed.
	Review actions for PORT CONDITIONS YANKEE and ZULU.
	Ensure personnel recall list (spread sheet) with numbers and addresses is up to date. Make copies for distribution to all personnel at setting of PORT CONDITION ZULU.

Command
(Primary Responsible Person: XO)

	Ensure all requirements of PORT CONDITION X-RAY have been completed.
	Anticipate full closure of the port when PORT CONDITION ZULU is set.
	Identify non essential Coast Guard personnel (input from planning section) for release to home.
	Identify MSO representative to RI EMA (pre-storm and post-storm).

Planning
(Primary Responsible Person: Chief, Security & Response Planning)

	Ensure that all actions required by PORT CONDITION X-RAY have been completed.
	Review actions for PORT CONDITION ZULU.
	Identify non essential unit personnel for release to home (especially members of established storm duty team).
	Ensure PORT CONDITION YANKEE broadcast is drafted and sent (CGMS and email/fax distribution) to advise port community of changing readiness condition (see BNM samples contained in Annex E). This broadcast closes the port to inbound vessel traffic.
	Send PORT CONDITION YANKEE (Hurricane Condition 2) attainment message to D1 (see sample in Annex D) upon completion of all items within this section (additional SITREPs sent every eight hours).
	Prepare PORT CONDITION ZULU (Hurricane Condition 1) attainment message. (See Annex D)

Operations
(Primary Responsible Person: Chief, Operations)

	Ensure that all actions required by PORT CONDITION X-RAY have been completed.
	Review actions for PORT CONDITION ZULU.
	Conduct final harbor patrols as necessary. (field offices assist)
	Carry out plan to stage response trailers and equipment at alternative locations. (field offices assist)
	Prepare for closure of the port when PORT CONDITION ZULU is set.
	Finalize list of available tugs.
	Make final arrangements for securing of unit spaces. Relocate equipment/files to safe locations, away from windows, relocate computer equipment or cover with waterproof covers (plastic), remove missile hazards located near windows. (field offices assist)
	Secure classified material, valuable documents, check books, electronic gear, and high- cost items either in place, on higher ground, or prepare for evacuation. Coordinate with Command Security Officer, Classified Material Control Officer, Chief of Administration Department. (field offices assist)
	Notify state emergency agencies, RIDEM, MADEP, cleanup contractors, etc. of the continuous watch at the MSO. Ensure we obtain their 24 hr contact info; include in comms plan.
	Disseminate communications plan to key personnel.

HURRICANE CONDITION 2 (PORT CONDITION YANKEE) (24 Hour Alert)

Prevention

(Primary Responsible Person: Chief, Prevention)

	Ensure that all actions required by PORT CONDITION X-RAY have been completed.
	Review actions for PORT CONDITION ZULU.
	Monitor vessel movements. Port will be closed to inbound traffic. Departing traffic to be allowed provided vessels clear Brenton Reef prior to the onset of PORT CONDITION ZULU. In cases where vessels or facilities refuse to follow the safety recommendations and fail to make adequate preparations, issue COTP orders to require the appropriate precautions.
	Ensure all bunkering and lightering operations are terminated.
	Compile information on vessel status in port, intentions to move vessels within the next 24 hours, etc. Ensure any conflicts are resolved.
	Contact agents who have not provided required information. Remind them the port will be closed when PORT CONDITION ZULU is set.
	Contact NE Pilots (401) 847-9050 to finalize information on vessels at anchor or anticipated vessel movements.

Finance/Logistics

(Primary Person Responsible: Chief, Admin)

	Ensure that all actions required by PORT CONDITION X-RAY have been completed. As necessary/directed

Command
(Primary Responsible Person: XO)

	Dispatch pre-storm MSO representative to RIEMA (will remain there until passage of storm).
	All hands final muster (including duty section that will remain at unit). Once final instructions/info is passed, release all but duty section.
	Advise the District if it is determined that complete evacuation of the MSO is necessary.

Planning
(Primary Responsible Person: Chief, Security & Response Planning)

	Ensure that all actions required by PORT CONDITION YANKEE have been completed.
	Muster personnel, conduct final brief on approaching storm, on post-hurricane recall procedures, and initiation of post-hurricane operations (communicate with field offices via conference call or through supervisor).
	Send PORT CONDITION ZULU (Hurricane Condition 1) attainment message to D1 (See Annex D) upon completion of all items within this section (additional SITREPs sent every four hours thereafter or more often if loss of life, major damage or unit operational limitations occur).
	Ensure PORT CONDITION ZULU broadcast is drafted and sent (CGMS and email/fax distribution) to advise port community of changing readiness condition (see BNM samples contained in Annex E). This broadcast closes the port.

Operations
(Primary Responsible Person: Chief, Operations)

	Ensure that all actions required by PORT CONDITION YANKEE have been completed.
	Secure windows and doors with tape and plastic at main office and field offices, if necessary.
	Assign available vehicles to unit personnel to be taken home for post-storm survey as necessary. (field offices distribute among personnel too)
	Ensure that D1 is informed of number of MSO personnel remaining in building.
	Establish periodic communications (comms schedule) with MSO reps at EMA EOCs (for RIEMA also use CDSTARS radio).
	Monitor all local National Weather Service radio broadcasts using NOAA weather radio.

Finance/Logistics
(Primary Person Responsible: Chief, Admin)

	Distribute personnel recall list to all personnel as necessary/directed

CHAPTER 3 - POST STORM RESPONSE

A. Initial Priorities and Actions.

1. General. Although this chapter is written with emphasis on response after a major hurricane, portions of this should be considered for other significant storms, e.g., multi-day nor'easters, significant tropical storm, significant ice impact, etc. To support the Coast Guard's primary goals of (1) resumption of operations and damage assessment, (2) perform statutory response missions and (3) provide assistance to other federal, state and/or local agencies as needed, the following actions will be performed (concurrently) immediately after passage of severe weather as necessary:

a. Personnel Assessment. Assess impact on personnel and personal property. As soon as practicable, all unit personnel shall report impact on person, family and personal property to the duty section. If unable to communicate with MSO Providence, contact nearest Coast Guard unit and/or supervisor/department head.

(1) Following the passage of severe weather, the COTP will recall unit personnel as necessary. Auxiliary and reserve personnel should be contacted in accordance with chapter 2.

(2) Announcements may be made over local radio stations or the unit's information line (401) 435-2328. Prior to the evacuation of the unit, personnel will be informed regarding specific stations to monitor. All personnel should listen on commercial and emergency frequencies for an announcement that may require action. Prior to evacuation of the MSO, personnel will be given specific instructions on how and when to report for duty.

b. Unit Damage Assessment. Assess damage to the command. Main office duty section personnel shall perform survey of all Coast Guard buildings and equipment (including GVs) and report findings to the command. Field office personnel shall conduct same of their facilities and report to Command Duty Officer. The CO will make a determination based on the results of the assessment whether to resume operations at the MSO. If the unit is determined uninhabitable, operations will be controlled from an alternate command post until the MSO is functional (refer to Responsibilities of MSO Providence Personnel during Continuity of Operations Plan (COOP), MSOPROVINST 5401.3).

(1) Safety procedures must be followed to minimize the risk to personnel from weakened or damaged buildings, gas leaks and electrical hazards.

(2) Repair and return to operation all Coast Guard equipment and property.

(3) Reports made via SITREPs and CASREP messages.

c. AOR Damage Survey. After severe weather has passed, the primary focus of the COTP will be to reopen the port as quickly as possible. Survey teams will assess damage to the port area, particularly waterfront facilities and restricted channels.

(1) Confer with pilots, GWH and ATON units to determine status of major aids.

(2) Implement restrictions on vessel movements as appropriate. Issue advisories on port related activities.

1. Aerial Assessment. The COTP shall coordinate aerial assessments with CG Air Station Cape Cod, state Emergency Management Agencies and Air National Guard units. Aerial observations using Coast Guard, Coast Guard Auxiliary, and other appropriate aircraft will be utilized to survey ports and waterways. Primary focus will be given to pollution, navigational hazards and aids to navigation (ATON) verification/restoration. Normally a MSFO Cape Cod representative will conduct an overflight along with an ATON representative to document physical damage, determine channel obstructions and identify pollution incidents throughout AOR. This information will be used to expedite reopening of the port.

2. Surface Assessment. Surface assessments will be coordinated through Group Woods Hole and state/local officials (including the Northeast Pilots). Initial damage assessments may be made by local emergency/law enforcement agencies responding to search and rescue cases. Police and fire departments are most likely the first to enter the port areas and report situations as they are observed.

a. The COTP will communicate with Group Woods Hole, the U.S. Army Corps of Engineers (ACOE), NOAA and the U.S. Navy Supervisor of Salvage (SUPSALV) regarding waterway navigability assessments following periods of severe weather as necessary. Channel surveys should be performed to identify obstructions or shoaling in the navigation channels. The Northeast Pilots (http://www.nemarinepilots.com/) will conduct a survey (along with NOAA and local ATON teams and local buoy tenders) of area waterways. Past history indicates the initial survey of aids within Narragansett Bay should take approximately four hours.

b. Radio communications will be established with Group Woods Hole and Air Station Cape Cod to coordinate AOR assessment and damage reporting.

B. Actions to Reopen the Port.

1. General. Although prior planning and prompt implementation of precautionary actions will do much to avoid loss of life and property, a category three hurricane can wreak havoc on the region. A significant storm surge could inundate residential and industrial areas causing extensive damage. These areas will also experience secondary damage from fires and structures weakened by water damage.

2. Port Considerations.

a. The primary concerns of the COTP with regard to hurricanes are:

(1) Aids to navigation expected to be missing or destroyed and will be considered unreliable for safe navigation until ATON verification is conducted.

(2) Vessels and barges may be drifting or aground in or near channels.

(3) Port closure prevents petroleum deliveries to facilities.

(4) Silting in the channel will decrease the controlling depth and limit access by some commercial vessel traffic.

(5) Bridges over navigable waterways are potential choke points either from storm damage to the bridge or an obstruction under the bridge.

(6) Evaluate the extent of oil spills or hazardous material releases in the port area, and identify potential sources.

(7) Inspect facilities. Bulk oil storage facilities near the water may pose a significant threat to the environment if exposed to storm surge flooding.

b. The following may assist with resolving navigational hazards: U.S. Army Corps of Engineers, U.S. Navy Supervisor of Salvage (SUPSALV), NOAA and commercial salvage companies. Removing wrecks, clearing obstructions or dredging silted channels may require long-range planning and ICS implementation.

3. Aids to Navigation Restoration. First District (oan) and Group Woods Hole (ATON) will oversee the establishment of temporary aids to navigation service, as necessary, to reopen the channel. Priority should be given to the Cape Cod Canal, Buzzards Bay and Narragansett Bay.

4. Channel Clearing Operations. The COTP will communicate with the ACOE, NOAA and the Navy SUPSALV regarding channel-clearing operations. Channel surveys may be performed by Group Woods Hole, ACOE or NOAA vessels.

5. Commercial/Recreational Vessel Salvage.

a. Priority. After severe weather, the primary focus of the COTP will be to assess damage incurred and reopen the port as quickly as possible. Thorough damage assessments must be completed quickly so salvage and pollution response can be prioritized.

(1) Resources. The following are salvage resources available to the COTP.

a. U.S. Coast Guard Marine Safety Center. The Marine Safety Center Salvage Engineering Response Team (SERT) is available 24 hours a day to assist with evaluating structural integrity and stability.

b. Army Corps of Engineering. Under a Memorandum of Agreement between the U.S. Army and U.S. Coast Guard, the COTP can request assistance from the ACOE for the marking and removal of sunken vessels and obstructions to navigation in federally maintained channels. Furthermore, the ACOE provides the resources for dredging operations that may be required due to silting.

c. U.S. Navy Supervisor of Salvage. The U.S. Navy is authorized to provide salvage and towing operations to other federal agencies, if requested. The U.S. Navy Supervisor of Salvage (SUPSALV) is an excellent resource available to the COTP that can be used in wreck removal and pollution cleanup.

d. Salvage Companies. Salvage companies are available and may be hired to assist in reopening the port. A list of companies can be obtained through the current yellow pages and/or the Rhode Island and Southeastern Massachusetts Area Contingency Plan for Oil and Hazardous Materials.

C. Post-Hurricane Condition. After conducting a port survey and assessment, the COTP will amend the port condition as necessary. The COTP will send a message to CCGD1 to notify them of the current hurricane condition status. Group Woods Hole will broadcast a Notice to Mariners advising the port community that the port will remain closed until all ATON has been adequately surveyed and restored.

D. Other Agency Interaction.

1. Federal Emergency Management Agency Response.

a. The Federal Response Plan (Public Law 93-288) (http://www.fema.gov/r-n-r/frp/) addresses the consequences of any disaster or emergency situation requiring federal response assistance. It describes the basic mechanism and structures by which the federal government will mobilize resources and conduct activities to augment state and local response efforts.

b. In the event of a hurricane, partial authority for response assistance has been delegated to the Director, Federal Emergency Management Agency (FEMA). During the period immediately following a major disaster for emergencies requiring federal aid, lead federal agencies, when directed by FEMA, will take actions to identify requirements and mobilize resources to the affected area to assist the state in its lifesaving and life-protecting response efforts. FEMA will work in coordination with the state and local Emergency Operations Center(s) affected by the storm.

c. The primary response agencies, as designated by FEMA, have been grouped together under 12 functional Emergency Support Functions (ESFs) to facilitate the provision of response assistance. Each ESF covers an aspect of a response effort, e.g., mass care, food, transportation, etc. FEMA will determine which ESFs are required to be activated based on the scope and severity of damage. The primary ESFs that the COTP may be tasked to provide assistance to are ESF #1 (Transportation), ESF #10 (Hazardous Materials), and ESF #7 (Military Support). However, the COTP should be prepared to assist FEMA under other support efforts provided, carrying out primary Coast Guard responsibilities are not hindered.

(1) A significant disaster may severely hamper waterborne traffic within the Providence AOR. Under the Federal Executive Agent of ESF #1, http://www.fema.gov/r-n-r/frp/frpesf1.htm usually a Department of Transportation (DOT) representative, the COTP will assist in the control of vessel traffic and port activities to allow valuable resources to enter the Port to support disaster response efforts.

(2) In the event of a discharge of oil or hazardous materials from a vessel or facility, the COTP under the National Contingency Plan (NCP) would assume the role of Federal On-Scene Coordinator (FOSC), if the release occurred in navigable waters or within the COTP jurisdiction. ESF #10, (http://www.fema.gov/r-n-r/frp/frpesf10.htm) provides the support to state and local governments in response to an actual or potential release due to severe weather.

(3) A disaster may require the use of military resources. Under ESF #7, http://www.fema.gov/r-n-r/frp/frpesf7.htm military assistance typically includes security, subsistence, medical care, transportation and public works. The COTP will provide as much assistance as possible without hindering primary marine safety related missions.

2. Emergency Management Agency (EMA) Liaison Responsibilities.

a. As soon as practicable after the storm's passage, the EMA liaison watch relief will take place. During post-storm recovery efforts, the state EMA liaison will:

(1) Relay information on bridge closures and efforts being made to restore their operation.

(2) Relay information on conditions in the region that may hinder damage assessment and response efforts, e.g., flooding, damaged roads, etc.

(3) Coordinate search and rescue and recovery efforts between the Coast Guard and local responders.

(4) Relay information on damage assessment of the port area including obstructions to navigation, damage to vessels and facilities, and potential or actual discharges of oil or hazardous materials.

(5) Brief the COTP on emergency operation efforts where Coast Guard assistance may be needed.

(6) Remain until response efforts involving Coast Guard assets have terminated or the COTP deems it unnecessary.

E. Situation Reports (SITREPs). During emergency response operations following the passing of severe weather, MSO Providence will prepare daily disaster response situation reports (SITREPs) to be sent to First District (cc, m, o, oan). The SITREPs will provide District with information pertaining to resources and personnel allocations and the unit's involvement in disaster response efforts. SITREPs will be prepared until the termination of recovery operations (see Annex C for sample SITREP).

F. Prioritizing Vessel Movement. Vessel traffic control, channel restrictions and pilotage requirements will continue as long as the COTP deems necessary. The COTP may issue Captain of the Port Orders directing the movements of vessels. The COTP may also establish safety zones or restrict transits to "daylight only" and additionally may require tug escorts. The COTP will work with pilots, shipping agents and the Port Safety Team to coordinate vessel traffic.

G. Logistics. A hurricane may cause shortages of food, water and supplies in the affected area. Therefore, preparation is essential in providing logistical support to MSO Providence following severe weather. The MSO Providence's Administration Department shall procure supplies and store them, prior to June 1st, to sustain a duty section for unit recovery actions for at least three (3) days.

1. Transportation.

a. Land. All government vehicles are available for assessment and response efforts. If additional vehicles are needed, commercial rental vehicles may be authorized by the command. Usually, government vehicles (especially 4x4 vehicles) will be pre-staged with unit personnel throughout the AOR.

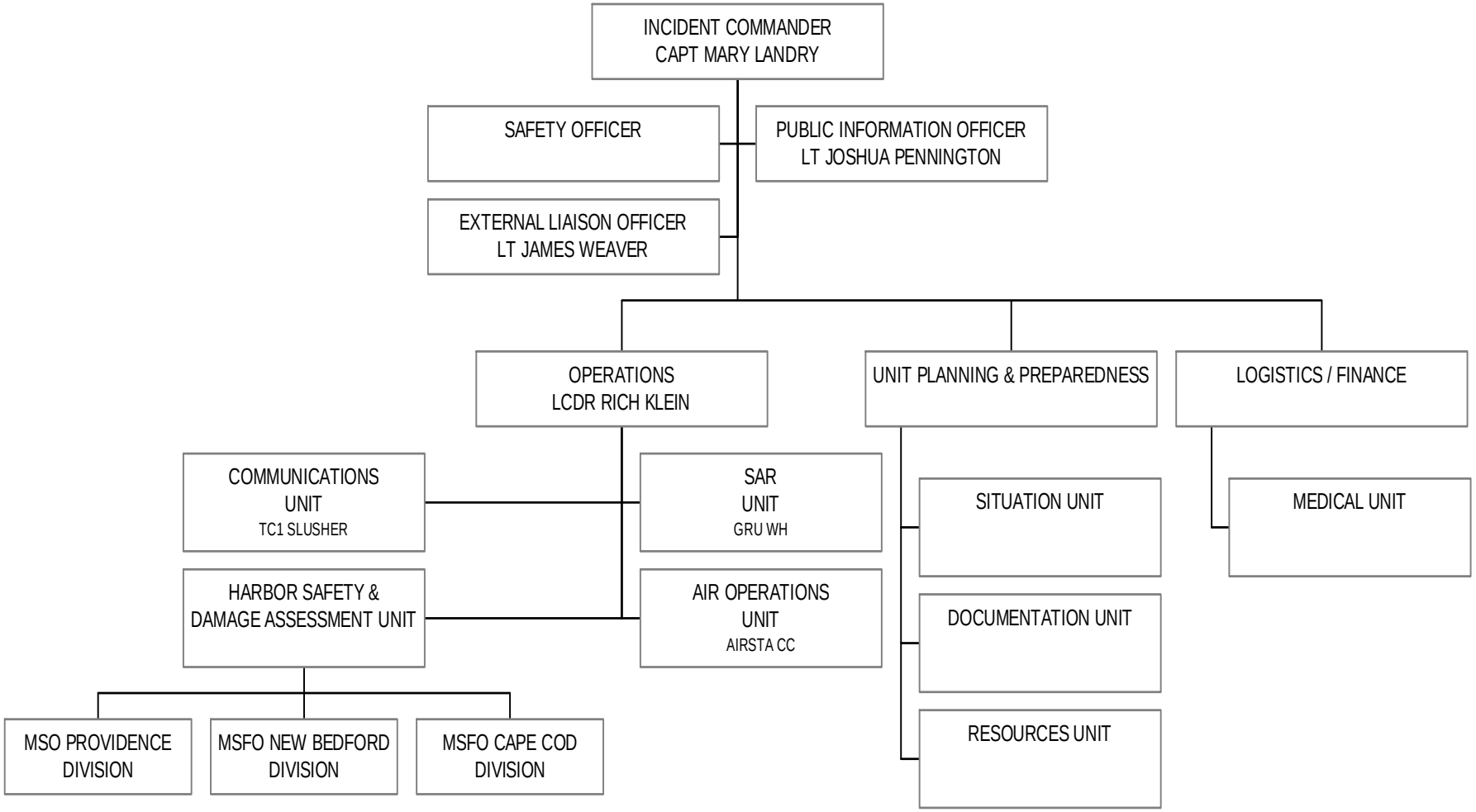
b. Water. All waterborne transportation will be coordinated and conducted with Group Woods Hole, state and local agencies, e.g., RIDEM, MA Environmental Police, harbormasters, Northeast Pilots, etc.

2. Food. A 3 day supply, based upon 5 persons, of MREs and water are available for MSO personnel assigned to pre-storm duty section.

3. Emergency Equipment. Any additional emergency equipment necessary to support response and recovery efforts will be coordinated through the logistics section. If equipment cannot be obtained through government sources in the area, emergency equipment can be purchased through outside sources.

H. After Action Reports (AARs). Refer to CCGDONE OPLAN 9710-95 for submitting AARs.

ANNEX A TO MSO PROVIDENCE SEVERE WEATHER CONTINGENCY PLAN SEVERE WEATHER
ICS ORGANIZATION



PERSONNEL	**ASSIGNMENT**
CO / XO	Incident Commander
Unit PAO (as necessary)	PIO
Unit SOHC (as necessary)	Safety
RI EMA Rep (designated)	External Liaison
Chief, Prevention Dept / Asst	Operations
MSFO Cape Cod Supervisor	MSFO Cape Cod Division
MSFO New Bedford Supervisor	MSFO New Bedford Division
Chief, Waterways Management / Asst	MSO Providence Division
Chief, Response & Planning / Asst	Unit Planning & Prep
Unit CTO*, Asst. CTO, YN3	Communications Unit
As directed	Situation Unit
As directed	Documentation Unit
As directed	Resources Unit
Chief, Admin / SK1	Logistics / Finance

*Command Technology Officer (TC and MST are both formally designated)

HURRICANE WATCH LIST

[DATE]

HURRICANE/TROPICAL STORM (NAME)

Pre/during hurricane live watch: 24 hour live duty sections to be initiated between the setting of hurricane condition two & one and at the direction of the Chief, Response & Planning Department after consultation with the XO/CO.

CDO:
Insp/IO:
RPO1:
RPO2:
Admin:

* **Post hurricane live watch:** To commence once the hurricane has passed and at the discretion of the Chief, Response & Planning Department. Live watch will terminate at the discretion of the Chief, Response & Planning Department. All above actions taken after consultation with XO/CO.

CDO:
Insp/IO:
RPO1:
RPO2:
Admin:

Drafted by: _____

Approved by:_____

* This watch section should make time prior to implementation of live watch to go home and address any personal needs. Supervisors shall ensure that time is given to these individuals to attend to there needs.

ANNEX B TO MSO PROVIDENCE SEVERE WEATHER CONTINGENCY PLAN
HURRICANE SEASONAL ALERT STATUS

P 01XXXXZ JUN 02
FM COGARD MSO PROVIDENCE RI
TO CCGDONE BOSTON MA//CC/M//
BT
UNCLAS //N03006//
SUBJ: HURRICANE SEASONAL ALERT STATUS
A. COMLANTAREA COGARD PORTSMOUTH VA 31XXXXZ MAY 02
1. AS OUTLINED IN REF A, THIS COMMAND HAS ATTAINED HURRICANE SEASONAL ALERT STATUS.
BT
NNNN

Note: Expect an annual tasking message requiring above action from LANTAREA via D1 (usually sent in **late** May).

U.S. Coast Guard Marine Safety Office
Captain of the Port
20 Risho Avenue
East Providence, Rhode Island
02914-1208
(401) 435-2300
or (800) 644-0217
Fax: (401) 435-2399

MARINE SAFETY INFORMATION BULLETIN

[MSIB # XX-XX]
mmmm / dd, / yyyy

HURRICANE SEASON AND PROPER PLANNING

Hurricane season for the North Atlantic commenced June 1 and continues to November 30. Now is the time to dust off your hurricane and heavy weather plans. I encourage you to consider the actions that you would take in the event of a hurricane or severe weather. This includes internal and external communication procedures, as well as methods of minimizing storm damage and oil/hazmat spill potential such as ballasting down storage tanks and draining transfer lines.

Upon actual implementation of our contingency plan, Marine Safety Office Providence will contact the maritime community to establish communications and ensure adequate preparations are being carried out. Important decisions with respect to commercial vessels and facilities will be made based on preparations being conducted and other risk assessment considerations. To facilitate information sharing, an emergency meeting of the Narragansett Bay Port Safety Team will likely be called.

In most cases, given ample warning of a hurricane strike, vessels may be advised to put to sea or directed to an anchorage providing a lee. Also, all marine related transfers will likely stop and the port may be closed by Captain of the Port Order.

A tabletop or walk-through exercise is a good way to review your contingency plans, make improvements if necessary and introduce new personnel to their roles should a hurricane strike the area. If you feel it would be beneficial for MSO Providence personnel to be involved with your exercise evaluation or plan development, please contact _____ at 401-435-2341.

COTP NAME HERE
Captain, U.S. Coast Guard
Captain of the Port

Note: Seasonal alert MSIB normally sent via email/fax in late June.

ANNEX C TO MSO PROVIDENCE SEVERE WEATHER CONTINGENCY PLAN
POST HURRICANE BROADCAST NOTICE TO MARINERS TEMPLATES

(POST HURRICANE)

O (DTG)
FM COGARD MSO PROVIDENCE RI
TO COMCOGARDGRU WOODS HOLE MA
INFO CCGDONE BOSTON MA//O/M/OAN/DPA/CC//
BT
UNCLAS//N03140//
SUBJ: REQUEST BROADCAST NOTICE TO MARINERS
1. REQUEST THE FOLLOWING NOTICE TO MARINERS BE BROADCAST UPON RECEIPT AND AT EACH SCHEDULED BROADCAST UNTIL _____.
"QUOTE"
THE U.S. COAST GUARD CAPTAIN OF THE PORT HAS SET HURRICANE CONDITION TWO (PORT CONDITION YANKEE) FOR NARRAGANSETT BAY, BUZZARDS BAY, AND CAPE COD BAY. A SAFETY ZONE FOR THE FOLLOWING AREAS: _____ REMAINS IN EFFECT. VESSEL MOVEMENT IS LIMITED AS FOLLOWS _____. MARINERS ARE ADVISED TO EXERCISE CAUTION WHEN TRANSITING RESTRICTED WATERS DUE TO GUSTY WINDS, HIGH SEAS, AND AIDS TO NAVIGATION POSSIBLY BEING OFF STATION AND UNRELIABLE. MOVEMENT OF VESSELS REQUIRING DOCKING MASTERS AND BAR PILOTS MAY BE RESTRICTED SINCE DOCKING MASTERS AND BAR PILOTS GENERALLY DO NOT MOVE VESSELS UNTIL WINDS ABATE BELOW 39 MPH, AND ATON, CHANNEL AND WATERWAY SURVEYS HAVE BEEN CONDUCTED.
"UNQUOTE"
BT

NOTE: WE MAY KEEP CERTAIN AREAS OF THE PORTS UNDER A SAFETY ZONE WHERE HAZARDS ARE KNOWN.

ANNEX C TO MSO PROVIDENCE SEVERE WEATHER CONTINGENCY PLAN
POST HURRICANE DAMAGE ASSESSMENT AND ASSISTANCE REQUEST SITREP

Per Tab X to Appendix 21 to Annex C to CCGDONE OPLAN 9710-95, a post hurricane damage assessment and assistance request SITREP must be forwarded to D1 as soon as possible after the storm passes (**negative reports are required**).

O XXXXXXZ XXX XX
FM COGARD MSO PROVIDENCE RI
TO CCGDONE BOSTON MA//CC/M/O//
INFO COMCOGARD MLC LANT NORFOLK VA
COGARD FINCEN CHESAPEAKE VA
COMCOGARD NPFC WASHINGTON DC
COGARD NSFCC ELIZABETH CITY NC
COGARD AST FORT DIX NJ
COMCOGARDGRU LONG ISLAND SOUND NEW HAVEN CT
COMCOGARDGRU WOODS HOLE MA
COGARD AIRSTA CAPE COD MA
COGARD MSO BOSTON MA
COGARD STA CASTLE HILL RI
COGARD STA POINT JUDITH RI
COGARD STA CHATHAM MA
COGARD STA BRANT PT MA
COGARD STA CAPE COD CANAL MA
COGARD STA MENEMSHA CHILMARK MA
COGARD STA PROVINCETOWN MA
COGARD STA WOODS HOLE MA
COGARD ANT BRISTOL RI
COGARD ANT WOODS HOLE MA
ZEN/MASS DEPARTMENT OF ENVIRONMENTAL PROTECTION
ZEN/RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
ZEN/MASS EMERGENCY MANAGEMENT AGENCY
ZEN/RHODE ISLAND EMERGENCY MANAGEMENT AGENCY
BT
UNCLAS //N16000//
SUBJ: POST HURRICANE DAMAGE ASSESSMENT (AND ASSISTANCE REQUEST, IF NECESSARY)
1. SITUATION:
A. (BRIEF DESCRIPTION OF INCIDENT)
1. CURRENT/FORECASTED WX.
2. ASSESS IMPACT ON PERSONNEL AND PERSONAL PROPERTY AND THE ABILITY OF AFFECTED PERSONNEL TO RETURN TO DUTY.
3. ASSESS DAMAGE TO COAST GUARD PROPERTY AND EQUIPMENT (ABILITY TO RESUME STATUTORY MISSIONS).
4. SURVEY AREA OF RESPONSIBILITY AND REPORT DAMAGE.
5. ACTION TAKEN (CHRONOLOGY).
6. FUTURE PLANS AND RECOMMENDATIONS.
A. RESOURCE REQUIREMENT PROJECTIONS (RESERVES, EQUIPMENT, ETC.).
B. RESOURCES RECEIVED (E.G. PEOPLE, PLANES, ETC.).
C. PLANS (INCL RELEASE OF RES OR TAD #)
D. SPECIFIC DIRECTION NEEDED.
BT

ANNEX D TO MSO PROVIDENCE SEVERE WEATHER CONTINGENCY PLAN CONDITIONS 2 AND 1 (YANKEE AND ZULU) ATTAINMENT MESSAGE TEMPLATES

SET HURRICANE CONDITION 2 (PORT CONDITION YANKEE)

P XXXXXXZ XXX XX
FM COGARD MSO PROVIDENCE RI
TO CCGDONE BOSTON MA//CC//
INFO COMCOGARDGRU WOODS HOLE MA
BT
UNCLAS //N16000//
SUBJ: HURRICANE _____, CONDITION 2 (PORT CONDITION YANKEE)
A. CCGDONE BOSTON MA XXXXXXZ XXX XX
B. CCGDONE OPLAN 9710-95
C. LANTAREAINST 16601 DTD 19 SEP 2000
1. AS OUTLINED IN REF A, B AND C, THIS COMMAND HAS ATTAINED HURRICANE CONDITION 2 (PORT CONDITION YANKEE).
BT

SET HURRICANE CONDITION 1 (PORT CONDITION ZULU)

P XXXXXXZ XXX XX
FM COGARD MSO PROVIDENCE RI
TO CCGDONE BOSTON MA//CC//
INFO COMCOGARDGRU WOODS HOLE MA
BT
UNCLAS //N16000//
SUBJ: HURRICANE _____, CONDITION 1 (PORT CONDITION ZULU)
A. CCGDONE BOSTON MA XXXXXXZ XXX XX
B. CCGDONE OPLAN 9710-95
C. LANTAREAINST 16601 DTD 19 SEP 2000
1. AS OUTLINED IN REF A, B AND C, THIS COMMAND HAS ATTAINED HURRICANE CONDITION 1 (PORT CONDITION ZULU).
BT

BROADCAST NOTICE TO MARINERS (72 HOUR ALERT)

O (DTG)
FM COGARD MSO PROVIDENCE RI
TO COMCOGARDGRU WOODS HOLE MA
INFO CCGDONE BOSTON MA//O/M/OAN/DPA/CC//
BT
UNCLAS//N03140//
SUBJ: REQUEST BROADCAST NOTICE TO MARINERS
1. REQUEST THE FOLLOWING NOTICE TO MARINERS BE BROADCAST UPON RECEIPT AND AT EACH SCHEDULED BROADCAST UNTIL HURRICANE CONDTION 3 (PORT CONDITION X-RAY) IS SET.
“QUOTE”
THE U.S. COAST GUARD CAPTAIN OF THE PORT HAS SET HURRICANE CONDITION 4 (PORT CONDITON WHISKEY) FOR NARRAGANSETT BAY, BUZZARDS BAY, AND CAPE COD BAY. GALE FORCE WINDS FROM HURRICANE _____ ARE EXPECTED TO MAKE LANDFALL ALONG THE COAST OF _____ WITHIN 72 HOURS. PLEASURE CRAFT ARE ADVISED TO SEEK SAFE HARBOR. BRIDGES MAY NOT BE OPEN WHEN SUSTAINED WIND SPEEDS REACH 60 MPH OR WHEN EVACUATION IS IN PROGRESS. THE CAPTAIN OF THE PORT HAS ESTABLISHED A SAFETY ZONE FOR THE FOLLOWING AREAS: _____. TO ENTER, TRANSIT OR REMAIN WITHIN THIS SAFETY ZONE, VESSELS MUST COMPLY WITH THE FOLLOWING REQUIREMENTS: ALL COMMERCIAL VESSELS AND BARGES GREATER THAN 200 GROSS TONS MUST IMMEDIATELY ADVISE THE CAPTAIN OF THE PORT OF THEIR INTENT TO REMAIN IN PORT OR TO DEPART. COMMERCIAL VESSELS AND BARGES GREATER THAN 200 GROSS TONS DESIRING TO REMAIN IN PORT MUST ARRANGE SAFE MOORING AND SHALL COMPLETE AND SUBMIT IN WRITING WITHIN 24 HOURS TO THE CAPTAIN OF THE PORT A REMAINING IN PORT CHECKLIST FOR APPROVAL. COPIES OF THE CHECKLIST ARE AVAILABLE FROM THE CAPTAIN OF THE PORT. COMMERCIAL VESSELS AND BARGES OVER 200 GROSS TONS DEPARTING THE PORT MUST DEPART NOT LATER THAN __ HOURS PRIOR TO THE ARRIVAL OF GALE FORCE WINDS. VESSELS BOUND FOR THIS (THESE) PORT(S) WHICH ARE UNABLE TO DEPART ___ HOURS PRIOR TO THE ARRIVAL OF GALE FORCE WINDS ARE ADVISED TO SEEK AN ALTERNATIVE DESTINATION.
“UNQUOTE”
BT

BROADCAST NOTICE TO MARINERS (48 HOUR ALERT)

O (DTG)
FM COGARD MSO PROVIDENCE RI
TO COMCOGARDGRU WOODS HOLE MA
INFO CCGDONE BOSTON MA//O/M/OAN/DPA/CC//
BT
UNCLAS//N03140//
SUBJ: REQUEST BROADCAST NOTICE TO MARINERS
1. REQUEST THE FOLLOWING NOTICE TO MARINERS BE BROADCAST UPON RECEIPT AND AT EACH SCHEDULED BROADCAST UNTIL HURRICANE CONDTION 2 (PORT CONDITION YANKEE) IS SET.
"QUOTE"
THE U.S. COAST GUARD CAPTAIN OF THE PORT HAS SET HURRICANE CONDITION 3 (PORT CONDITION X-RAY) FOR NARRAGANSETT BAY, BUZZARDS BAY, AND CAPE COD BAY. GALE FORCE WINDS FROM HURRICANE _____ ARE EXPECTED TO MAKE LANDFALL ALONG THE COAST OF _____ WITHIN 48 HOURS. PLEASURE CRAFT ARE ADVISED TO SEEK SAFE HARBOR. BRIDGES MAY NOT BE OPEN WHEN SUSTAINED WIND SPEEDS REACH 60 MPH OR WHEN EVACUATION IS IN PROGRESS. THE CAPTAIN OF THE PORT HAS ESTABLISHED A SAFETY ZONE FOR THE FOLLOWING AREAS: _____. TO ENTER, TRANSIT OR REMAIN WITHIN THIS SAFETY ZONE, VESSELS MUST COMPLY WITH THE FOLLOWING REQUIREMENTS: ALL COMMERCIAL VESSELS AND BARGES OVER 200 GROSS TONS DESIRING TO REMAIN IN PORT MUST IMMEDIATELY SUBMIT IN WRITING TO THE CAPTAIN OF THE PORT THEIR REMAINING IN PORT CHECKLIST FOR APPROVAL. COMMERCIAL VESSELS AND BARGES OVER 200 GROSS TONS DEPARTING THE PORT MUST DEPART NOT LATER THAN __ HOURS PRIOR TO THE ARRIVAL OF GALE FORCE WINDS. MARINERS ARE ADVISED THAT THE CAPTAIN OF THE PORT WILL IMPOSE VESSEL TRAFFIC CONTROL MEASURES SIGNIFICANTLY LIMITING VESSEL MOVEMENT AND ACTIVITIES WHEN GALE FORCE WINDS ARE WITHIN 24 HOURS OF THE PORT. VESSELS BOUND FOR THIS (THESE) PORT(S) WHICH ARE UNABLE TO DEPART ___ HOURS PRIOR TO THE ARRIVAL OF GALE FORCE WINDS ARE ADVISED TO SEEK AN ALTERNATIVE DESTINATION.
"UNQUOTE"
BT

BROADCAST NOTICE TO MARINERS (24 HOUR ALERT)

O (DTG)
FM COGARD MSO PROVIDENCE RI
TO COMCOGARDGRU WOODS HOLE MA
INFO CCGDONE BOSTON MA//O/M/OAN/DPA/CC//
BT
UNCLAS//N03140//
SUBJ: REQUEST BROADCAST NOTICE TO MARINERS
1. REQUEST THE FOLLOWING NOTICE TO MARINERS BE BROADCAST UPON RECEIPT AND AT EACH SCHEDULED BROADCAST UNTIL HURRICANE CONDTION 1 (PORT CONDITION ZULU) IS SET.
"QUOTE"
THE U.S. COAST GUARD CAPTAIN OF THE PORT HAS SET HURRICANE CONDITION 2 (PORT CONDITION YANKEE) AND ESTABLISHED SAFETY ZONES FOR NARRAGANSETT BAY, BUZZARDS BAY, AND CAPE COD BAY. GALE FORCE WINDS FROM HURRICANE _____ ARE EXPECTED TO MAKE LANDFALL ALONG THE COAST OF _____ WITHIN 24 HOURS. PLEASURE CRAFT ARE ADVISED TO SEEK SAFE HARBOR. BRIDGES MAY NOT BE OPEN WHEN SUSTAINED WIND SPEEDS REACH 60 MPH OR WHEN EVACUATION IS IN PROGRESS. THE CAPTAIN OF THE PORT HAS ESTABLISHED A SAFETY ZONE FOR THE FOLLOWING AREAS: _____. NO VESSELS MAY ENTER, TRANSIT OR REMAIN WITHIN THIS SAFETY ZONE WITHOUT THE PERMISSION OF THE CAPTAIN OF THE PORT. THE FOLLOWING ADDITIONAL REQUIREMENTS ARE IN EFFECT: ALL TRANSFER OF CARGO OPERATIONS SHALL CEASE WHEN WIND SPEEDS REACH ___ MPH. MOVEMENT OF ALL VESSELS AND BARGES GREATER THAN 200 GROSS TONS WITHIN THE PORT(S) IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE CAPTAIN OF THE PORT. ALL COMMERCIAL VESSELS AND BARGES GREATER THAN 200 GROSS TONS DESIRING TO DEPART PORT MUST CONTACT THE CAPTAIN OF THE PORT TO ARRANGE IMMEDIATE DEPARTURE. ALL COMMERCIAL VESSELS AND BARGES GREATER THAN 200 GROSS TONS REMAINING IN PORT MUST BE AT THEIR MOORING SITE IN ACCORDANCE WITH THEIR REMAINING IN PORT CHECKLIST AS APPROVED BY THE CAPTAIN OF THE PORT. VESSELS BOUND FOR THIS PORT ARE ADVISED TO SEEK AN ALTERNATIVE DESTINATION.
"UNQUOTE"
BT

BROADCAST NOTICE TO MARINERS (12 HOUR ALERT)

O (DTG)
FM COGARD MSO PROVIDENCE RI
TO COMCOGARDGRU WOODS HOLE MA
INFO CCGDONE BOSTON MA//O/M/OAN/DPA/CC//
BT
UNCLAS//N03140//
SUBJ: REQUEST BROADCAST NOTICE TO MARINERS
1. REQUEST THE FOLLOWING NOTICE TO MARINERS BE BROADCAST UPON RECEIPT AND AT EACH SCHEDULED BROADCAST UNTIL HURRICANE CONDTION 2 (PORT CONDITION YANKEE) IS SET.
"QUOTE"
THE U.S. COAST GUARD CAPTAIN OF THE PORT HAS SET HURRICANE CONDITION 1 (PORT CONDITION ZULU) FOR NARRAGANSETT BAY, BUZZARDS BAY, AND CAPE COD BAY. GALE FORCE WINDS FROM HURRICANE _____ ARE EXPECTED TO MAKE LANDFALL ALONG THE COAST OF _____ WITHIN 12 HOURS. THE CAPTAIN OF THE PORT HAS ESTABLISHED A SAFETY ZONE FOR THE FOLLOWNG AREAS: _____. NO VESSELS MAY ENTER OR TRANSIT WITHIN THIS SAFETY ZONE WITHOUT THE PERMISSION OF THE CAPTAIN OF THE PORT.
"UNQUOTE"
BT

NOTE: MAY HAVE TO ADJUST THE HOUR DEPENDING ON THE WIND SPEED AND SEA STATE.

Necessary disaster supplies for duty personnel:

- **Water** - at least 1 gallon daily per person for 3 days
- **Food** - at least enough for 3 days
  non-perishable packaged or canned food / juices
  foods and snack foods
- **Non-electric can opener**
- **Cooking tools / fuel**
- **Paper plates / plastic utensils**
- **Clothing** - seasonal / rain gear/ sturdy shoes
- **First Aid Kit**
- **Toiletries** - hygiene items
- **Flashlight / Batteries**
- **Radio** - Battery operated and **NOAA** weather radio
- **Cash**
- **Tools** - keep a set with you during the storm
- **Vehicle fuel tanks filled**

ANNEX G TO MSO PROVIDENCE SEVERE WEATHER CONTINGENCY PLAN
CAPTAIN OF THE PORT ORDER TEMPLATE

U.S. Department of Transportation
United States Coast Guard

U. S. Coast Guard
Captain of the Port
Providence

20 Risho Ave.
East Providence, RI 02914-1208
Phone (401) 435 2300
Fax (401) 435-2399

16601/_____
_____ __, 2002

Master, M/V
c/o
Attn:
Address
City, State & Zip Code

USCG CAPTAIN OF THE PORT PROVIDENCE, RI ORDER NO. ___/02

The vessel, M/V _____, O.N. _____, is moored in the Port of Providence. I have determined that due to weather conditions caused by the impending Hurricane _____, the M/V _____ poses a potential threat to persons on board, the Port of Providence and to the marine environment. Under the authority of title 33 Code of Federal Regulations Part 160.111, I hereby order you as the Master-- that:

The M/V _____ is not allowed to move from its current location in the Port of Providence without my permission. Prior to any movement of the vessel within or departure from the port, you must submit a transit plan, including the status of passengers aboard, to me.

Failure to comply with this order is punishable by a civil penalty of not more than $27,500. Willful violation of this order is punishable by a fine of not more than $50,000 or imprisonment of not more than five (5) years, or both. Each day of a continuing violation constitutes a separate violation.

This order is not a grant of immunity from any law or regulation and in no way limits existing authority to impose civil penalties, fines, forfeitures or to initiate criminal prosecution for any violation of law or regulation. Provisions for appealing this order are contained in 33 CFR 160.7; however, all conditions of this order remain in full effect while such appeal is being processed unless specifically stated by the Commander, First Coast Guard District.

Please notify the Captain of the Port Providence via the above telephone number if you have any questions.

Sincerely,

NAME OF CAPTAIN
Captain, U. S. Coast Guard
Captain of the Port

ACKNOWLEDGMENT OF RECEIPT OF
CAPTAIN OF THE PORT ORDER #_____
CAPTAIN OF THE PORT (*insert appropriate COTP zone: New York, Boston, Providence, Portland*)

Date:_____

I hereby acknowledge the receipt of Captain of the Port Order #____ dated (*insert date of COTP Order)* signed by (*insert name and rank of Captain of the Port*), Captain of the Port (*insert Captain of the Port Zone*)

_____
Signature

_____
Printed or typed name and title

_____
Address

_____
Telephone

Enclosure (1)

U.S. Department of Transportation
United States Coast Guard

U. S. Coast Guard
Captain of the Port
Providence

20 Risho Ave.
East Providence, RI 02914-1208
Phone (401) 435 2300
Fax (401) 435-2399

16601/_____
_____ __, 2002

Master, M/V
c/o
Attn:
Address
City, State & Zip Code

USCG CAPTAIN OF THE PORT PROVIDENCE, RI ORDER NO. ___/02

The vessel, M/V _____, O.N. _____, is moored in the Port of Providence. I have determined that due to weather conditions caused by the impending Hurricane _____, the M/V _____ poses a potential threat to persons on board, the Port of Providence and to the marine environment. Under the authority of title 33 Code of Federal Regulations Part 160.111, I hereby order you as the Master-- that:

The master of the M/V _____ must put the vessel to sea due to the pending gale force winds from Hurricane _____ due to pass over the Providence, Rhode Island, Captain of the Port zone. The departure must be coordinated with the Northeast Pilots no later than ____hrs, _____ ___, 2002. Prior notification this order might be forthcoming was delivered to your vessel on _____ ____, 2002 by this office.

Failure to comply with this order is punishable by a civil penalty of not more than $27,500. Willful violation of this order is punishable by a fine of not more than $50,000 or imprisonment of not more than five (5) years, or both. Each day of a continuing violation constitutes a separate violation.

This order is not a grant of immunity from any law or regulation and in no way limits existing authority to impose civil penalties, fines, forfeitures or to initiate criminal prosecution for any violation of law or regulation. Provisions for appealing this order are contained in 33 CFR 160.7; however, all conditions of this order remain in full effect while such appeal is being processed unless specifically stated by the Commander, First Coast Guard District.

Please notify the Captain of the Port Providence via the above telephone number if you have any questions.

Sincerely,

NAME OF CAPTAIN
Captain, U. S. Coast Guard
Captain of the Port

ACKNOWLEDGMENT OF RECEIPT OF
CAPTAIN OF THE PORT ORDER #_____
CAPTAIN OF THE PORT (*insert appropriate COTP zone: New York, Boston, Providence, Portland*)

Date:_____

I hereby acknowledge the receipt of Captain of the Port Order #____ dated (*insert date of COTP Order)* signed by (*insert name and rank of Captain of the Port*), Captain of the Port (*insert Captain of the Port Zone*)

_____
Signature

_____
Printed or typed name and title

_____
Address

_____
Telephone

Enclosure (1)

HURRICANE – ACTION REQUIRED BY VESSELS OVER 200 GROSS TONS

The Captain of the Port (COTP) has established a heightened state of awareness in conjunction with Hurricane XXXXXXXX's expected landfall. In the interest of the safety of the port, every effort shall be made for all commercial oceangoing vessels or oceangoing barges over 200 gross tons due to arrive in port be diverted to an alternate location and that all such vessels currently in port be put to sea.

The safest condition for the port during the arrival of a hurricane (or other unusual extreme weather conditions) is when the inventory of vessels inport is at a minimum. Vessel's owners/operators and agents will make every attempt to put their vessels to sea whenever a hurricane (or other unusual extreme weather condition) threatens the port. In the event a commercial oceangoing vessel or oceangoing barge over 200 gross tons is not capable of safely putting to sea, the person in charge of the vessel must provide specific information concerning the vessel's status prior to the COTP approval to remain in port.

Information required from commercial oceangoing vessels and oceangoing barges over 200 gross tons unable to depart port during hurricanes or severe weather conditions:

The information listed on the attached sheets must be provided in order for an oceangoing vessel/barge to remain in port. It is recommended the vessels and barges be boarded by MSO Providence/Field Office personnel, as operational requirements permit. If it is not possible to board each vessel and barge, the forms may be faxed and filled out by the vessels person-in-charge.

No vessel will be allowed to remain at facilities which are within one half mile of a bridge.

Vessels allowed to remain in port must have the decks clear of unsecured objects, missile hazards, potential pollution hazards and flammable materials. All persons in charge must ensure hatches are secured for heavy weather.

HEAVY WEATHER - Vessels over 200 gross tons

For items 1 through 4, the vessel's history may be pulled from MISLE. Ensure the Involved Parties (owner/operator) supplement is included with the history.

1. Vessel name:_____ Official number:_____ Call sign: _____ Flag: _____
   Length: _____ Gross tons: _____ Net tons: _____
2. Owner's name and address: _____
   _____
3. Operator's name and address: _____
   _____
4. Agent/phone number: _____
5. 24 HR POC & phone number:_____
6. 24 HR POC for QI(s)_____
7. Must provide full insurance disclosure to the Captain of the Port.
8. Cargo onboard: _____ Amount of cargo onboard:_____
9. Amount of oil onboard. Bunkers:_____ Diesel:_____ Lube oil:_____
10. Draft fwd:_____ Draft aft:_____
11. Amount of ballast onboard:_____ Total capacity of ballast tanks:_____
12. Number of personnel onboard:_____ Name of Master:_____
13. Condition of vessel:_____
14. Have all non-secured objects been or will be removed from deck? _____
15. How is vessel moored? How many extra mooring lines/cables?_____
    (The PIC of the vessel must submit in writing a mooring plan for approval by the Captain of the Port)
    (ATTACH A DIAGRAM)
16. Operational status of machinery Main engine:_____ Single or Twin screw_____
    Generators:_____ Fire fighting: _____ Bilge pumps:_____
    Anchors:_____
17. Any unusual conditions affecting the vessel's seaworthiness:_____
    _____
18. Reason why vessel is staying in port :_____
    _____
19. Name and location of facility/berth:_____
20. Depth at berth at low tide:_____

Additional notes or diagrams as needed

HEAVY WEATHER - Tug and Barge Combination over 200 gross tons

For items 1 through 4, and 14 thru 16, the vessel's history may be pulled from MISLE. Ensure the Involved Parties (owner/operator) supplement is included with the history.

1. Barge name:_____ Official number:_____ Call sign:_____Flag: _____
   Length:_____ Gross tons:_____ Net tons:_____
2. Owner's name and address:_____
   _____
3. Operator's name and address:_____
   _____
4. Agent/phone number:_____
5. 24 HR POC & phone number:_____
6. 24HR POC for QI's _____
5. Cargo onboard:_____ Amount of cargo onboard:_____
6. Draft fwd:_____ Draft aft:_____
7. Number of personnel onboard:_____Tankerman in charge:_____
8. Condition of barge:_____
9. Have all non secured objects been or will be removed from deck?_____
10. How is barge moored? How many extra mooring lines/cables?_____
    (The person in charge of the barge and the assist tug(s) must submit in writing a mooring plan for approval by the Captain of the Port)
11. Operational status of machinery Cargo pumps:_____ Generators:_____
    Fire fighting:_____Bilge pumps:_____ Anchors:_____
12. Any unusual conditions affecting the barge's seaworthiness:_____
    _____
13. Reason why barge is staying in port :_____
14. Tug(s) name(s):_____Official number:_____Call sign:_____ Flag:____
15. Tug owner name and address:_____
    _____
16. Tug operator name and address:_____
    _____
17. 24HR POC for QI's _____
18. Amount of oil onboard. Diesel:_____ Lube oil:_____
19. Amount of ballast onboard:_____ Total capacity of ballast tanks:_____
20. Number of personnel onboard:_____Name of Master:_____
21. Condition of tug(s):_____
22. Have all non secured objects been or will be removed from deck?_____
23. How is tug moored? How many extra mooring lines/cables?_____
    (The person in charge of the barge and the assist tug(s) must submit in writing a mooring plan for approval by the Captain of the Port)
24. Operational status of machinery Main engine(s):_____ Generators:_____
    Fire fighting:_____Bilge pumps:_____ Anchors:_____
25. Any unusual conditions affecting the tugs seaworthiness:_____
    _____
26. Name and location of facility/berth:_____
    _____
27. Depth at berth at low tide:_____

Additional notes or diagrams as needed:

VESSEL REMAINING IN PORT STATUS

VESSEL	LGTH	GT	LOCATION	STATUS/POB/AGENT/ 24 HR POC	CARGO	PRI
P/V REGAL EMPRESS	610.5	21909	PIER 4/5 PROVPORT	• VESSEL NOT TO DEPART W/O COTP PERMISSION. • 627 PASSENGERS ON BOARD. • AGENT'S PAGER – 452-1022		
TUG CLIPPER T/B OCEAN 155	135.0 431	179 8666	ESCO TERMINAL CAPE COD CANAL	• T/B HAS 88,000 BARRELS OF NO. 6 FUEL ON BOARD. • TUG WILL REMAIN ON SCENE. • 7 POB's ON TUG & 2 TANKERMEN ON BARGE. • TUG'S PHONE (908) 309-0031 • ESCO (508) 888-2001		
PATRIOT STATE	546	13805	MASS MARITIME	• ALL LOOSE GEAR STOWED. • ALL MOORING LINES DOUBLED UP. • EXTRA LINE LED OUT TO PARADE FIELD AND OFFSHORE ANCHOR LOWERED		
T/B MEROPA 900	124.8	277	VINEYARD HAVEN	• VESSEL GAS FREE AND SECURED TO DOCK AT VINEYARD HAVEN		
T/B RANDO 200	78.7	85	LAKE TASHMOO MARTHA'S VINEYARD	• VESSEL EMPTY AND SECURED TO DOCK AT LAKE TASHMOO MARTHA'S VINEYARD		
T/B REGAL 100	36	15	VINEYARD HAVEN	• VESSEL ON RAILS AT DRYDOCK FACILITY IN VINEYARD HAVEN		
HI-LINE VESSELS			HYANNIS	• COMPANY WILL SECURE BY 1500. • AS OF 1000, THE VESSELS GREAT POINT AND GRAY LADY WERE MAKING ONE LAST RUN. • ALL VESSELS WILL BE MOORED IN HYANNIS		
STEAM SHIP AUTHORITY			VARIOUS LOCATIONS	• COMPANY WILL SECURE BY 1300. • VESSELS MOORED AT VARIOUS LOCATIONS: NEW BEDFORD, FALL RIVER, CAPE COD, NANTUCKET & MARTHA'S VINEYARD.		

MEMORANDUM OF AGREEMENT
BETWEEN
THE DEPARTMENT OF ARMY AND THE U.S. COAST GUARD

SUBJECT: Coast Guard and Department of Army Responses to Marking and Removal of Sunken Vessels and Other Obstructions to Navigation.

1. Purpose. The purpose of this memorandum of agreement (MOA) is to improve the efficiency and effectiveness of the Coast Guard and the Department of Army responses under each agency's respective authorities for the marking and removal of sunken vessels and other obstructions to navigation.

2. Provision of Agreement. This agreement provides procedures on coordination to determine whether an obstruction is a hazard to navigation and procedures to determine the appropriate corrective actions to be taken by both agencies.

3. Definitions. For the purpose of this agreement, the following definitions apply:

   a. Obstruction. Anything that restricts, endangers, or interferes with navigation. Obstructions can be authorized man-made structures such as bridges, pierheads, offshore towers, etc., or unexpected interference which must be assessed as to their effect on navigation.

   b. Hazard to Navigation. An obstruction, usually sunken, that presents sufficient danger to navigation so as to require expeditious, affirmative action such as marking, removal, or redefinition of a designated waterway to provide for navigational safety.

   c. Responsible Field Officers Are:

      (1) Department of Army

         (a) District Engineer, Army Corps of Engineers District, and

         (b) Division Engineer, Army Corps of Engineers Pacific Ocean and New England Division.

      (2) Coast Guard: Chief, Operations Division, Coast Guard District.

4. Objectives.

   a. Promote close coordination and cooperation between the Department of Army and the Coast Guard leading to prompt and decisive action in marking or removal of obstructions declared to be hazards to navigation.

   b. Provide guidance on the parameters and procedures for making Multi-Agency decisions for determining when an obstruction should be declared a hazard to navigation.

   c. Provide the chain-of-command relationship for resolving differences of opinion between the Department of Army and the Coast Guard as to the appropriate corrective action to initiate for hazards to navigation.

d. Assure timely and effective action to provide safe navigation to the maritime community.

5. Required Actions. Upon receiving reports of sunken vessels or other obstructions to navigation, each agency through its field office will take the following actions:

a. Assess the impact upon navigation of each reported obstruction and expeditiously identify appropriate corrective actions. In emergency situations, the agency first on scene should initiate immediate actions to mitigate the hazardous situation.

b. Decide through joint consultation and agreement between agency field offices if an obstruction is a hazard to navigation, agree upon appropriate corrective action(s) to reduce the danger to navigation to an acceptable level, and decide which agency shall act as lead agency for contacting the owner, if one exists, of the obstruction and executing corrective actions.

(1) Personal contacts between agency field offices are encouraged to facilitate decision-making.

(2) Timely response dictates that decisions be made at the field office level when possible.

(3) Decisions concerning corrective actions shall be supported by records appropriate to the specific case.

(4) Marking Issues. In every case where an obstruction is declared to be a hazard to navigation, the location will be marked immediately by the owner. In the event that the owner cannot be identified, refuses to mark the obstruction, inadequately marks the obstruction, or is otherwise unable to properly mark it, the Coast Guard has authority under 14 U.S.C. 86 to take appropriate action. When necessary the Department of Army will assist the Coast Guard in locating and marking hazards to navigation. Marking of an obstruction determined to be a hazard to navigation does not by itself remove the “hazard to navigation” status of the obstruction; however, under some circumstances it can be an acceptable alternative to other corrective actions.

(5) Removal Issue.

(a) Where an obstruction is declared to be a hazard to navigation and removal is the agreed appropriate corrective action, the respective Army Corps of Engineers District Engineer may take the initiative in accordance with 33 CFR 209.190(h) wherein removal of an obstruction under the provisions of Section 19 of the River and Harbor Act of 1899 (U.S.C. 414) may be undertaken without prior approval of the Chief of Engineers if the owner can be legally established in a shorter period, the cost of removal will not exceed $100,000 for each incident, and all reasonable efforts to require the owner to remove the wreck himself within a reasonable period have been exhausted. If an emergency condition exists, the district engineer may undertake removal under Section 20 of the River and Harbor Act of 1899 (23 U.S.C. 414) which eliminates the necessity to establish abandonment. The district engineers’ authority under Section 20 is limited to those removal incidents costing less than $100,000. For all incidents costing more than $100,000, prior approval from the Chief of Engineers must be obtained under either Section 19 or Section 20.

(b) The Coast Guard has authority for the alteration or removal of obstructive bridges under 33 CFR 414 and has authority to remove sunken vessels when they create a substantial pollution threat to the public health or welfare under 33 CFR 153.

c. The Coast Guard has authority to disseminate and maintain navigational safety information pertaining to obstructions and is the lead agency responsible for this type of information. This mission is complemented by related services offered by other sources, including the Army Corps of Engineers. Each agency's field offices will immediately notify their counterpart of any reported obstructions and will maintain close coordination to ensure that navigational safety information is disseminated in a timely and effective manner. Free exchange of information related to obstructions, including owner's name and address, will be made between agencies, subject to the requirements of the Privacy Act, 5 U.S.C. 522a.

d. Disagreements arising over the resolution of problems raised by hazards to navigation. The District Engineer and the Chief of Operations will document the area(s) of disagreement and present them to each other for consideration at least 14 days before forwarding of the issue to higher authority. If resolution cannot be achieved, the problem should be forwarded to the next higher level of authority. At the next higher level, a similar exchange of reviews should be made in the same time frame. If resolution cannot be reached here, a similar referral process should be made until resolution is achieved or the highest referral possible is made. Paragraph 8 delineates the chain-of-command for the purposes of this agreement.

e. The Coast Guard and Department of Army shall develop individual agency instructions to implement the MOA.

f. Field level offices of both agencies all periodically review the status of existing obstructions to determine the adequacy of corrective action(s), to determine if a resurvey of the obstructions location is necessary, to revise appropriate records, and to update public notification.

6. Applicability. This agreement applies to the navigable waters of the United States, as defined in Title 33 CFR 2.05-25.

7. Decision Making Guidance.

a. Option to consider in formulating appropriate action(s):
   (1) No action.
   (2) Charting.
   (3) Broadcasting and publication of navigational safety information.
   (4) Marking.
   (5) Redefinition of navigational area, e.g., channel fairway, anchorage, etc.
   (6) Removal.
   (7) Combination of the above.

b. Factors (not to be taken as all inclusive) to be considered in determining if a sunken vessel or other obstruction is a hazard to navigation and in determining which course of action(s) listed in paragraph 7.a. is appropriate to increase safety to an acceptable level:

   (1) The degree to which the obstruction restricts, endangers, or interferes with the navigability of a body of water.

      (a) Location with respect to navigational traffic patterns.
      (b) Navigational difficulty at the site of the obstruction.
      (c) Clearance or depth of water over obstruction.

(d) Fluctuation of water level and other hydraulic characteristics.

(2) Physical characteristics of the obstruction, including cargo (if any exists).

(3) Possible movement of the obstruction.

(4) Marine activity in the vicinity of the obstruction.

(a) Type of commercial and recreational vessel traffic.
(b) Density of commercial and recreational vessel traffic.
(c) Trends of Waterway use.

(5) Location of obstruction with respect to existing aids to navigation.

(6) Prevailing and historical weather conditions.

(7) Length of time the obstruction has been in existence.

(8) History of vessel accidents involving obstruction.

8. Chain-of-Command Relationships for Resolution of Differences.

a. Chief, Operations Division, Coast Guard District/District Engineer, Army Corps of Engineers District.

b. District Commander, Coast Guard District/District Engineer , Army Corps of Engineers District.

c. Chief, Office of Navigation, Coast Guard/Director of Civil Works, Office, Chief of Engineers.

9. Amendment, Duration, and Termination.

a. This MOA may be modified or amended by mutual consent of the signatories to this agreement or their designees. All such changes will be documented by written agreement.

b. This MOA is intended to remain in effect for as long as it continues to serve the purpose and objectives defined herein.

c. Either agency may terminate this MOA six months after giving formal written notice of intent to terminate.

10. Effective Date. This MOA is effective 90 days after execution by the Chief, Office of Navigation, U.S. Coast Guard, and the Director of Civil Works, Department of the Army.

Signed By
T.J. WOJNAR
Rear Admiral, U.S. Coast Guard
Chief, Office of Navigation

16 OCT 1985
(Date)

Signed By
H.J. HATCH
Major General, USA
Director of Civil Works

10 OCT 1985
(Date)

**UNITED STATES COAST GUARD
COOPERATION WITH
THE
AMERICAN NATIONAL RED CROSS
IN DISASTER RELIEF**

I. PURPOSE

To define the cooperative relationship existing between the United States Coast Guard and the American National Red Cross in time of disaster and establish general guidance for its implementation.

II. DEFINITION OF DISASTER

A disaster is an occurrence such as hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, earthquake, drought, blizzard, pestilence, famine, fire, explosion, building collapse, 'Transportation wreck, or other situation that causes human suffering or creates human needs that the victims cannot alleviate without assistance.

III. SCOPE

The term "disaster" as used herein applies only to natural disasters within the United States as mentioned in "Definition" and not to those caused by enemy attack or the threat thereof.

IV. POLICY

A. The Red Cross Disaster Program, as defined by the organization's operational procedures, mitigates suffering by meeting the urgent needs of victims and emergency workers immediately after a disaster has struck or in advance of a potential disaster. This Red Cross help includes food, clothing, shelter, first aid, and other basic elements for comfort and survival. Such help may be provided to large numbers of people in Red Cross operated shelters, at either fixed or mobile Red Cross feeding station, or at Red Cross emergency first aid stations, or it may be provided as individualized assistance to families who are able to live temporarily elsewhere. Such help to individual families may include not only the types of assistance listed above but also other urgently needed items that will help them to resume normal living patterns as quickly as possible. Families in Red Cross shelters are assisted in moving back to their homes, or to alternate homes if their own are untenable, as quickly as possible.

Arrangements are made for those victims who need additional medical care to receive that care at the nearest available medical facility. When necessary, the Red Cross augments local medical personnel and equipment and provides needed blood and blood products.

The Red Cross handles welfare inquiries from concerned families outside the disaster area.

The Red Cross also helps disaster victims needing long-term recovery assistance by advising and counseling them on the availability of resources so that they can resume living in keeping with acceptable standards of health, safety, and human dignity. Such resources include those of their family as well as of federal, state, and local agencies public and private with disaster loan or grant programs or with sustaining programs that would benefit the victims. Also, if there are no

other resources available, the Red Cross may provide direct additional assistance to enable the victims to re-establish themselves.

Red Cross disaster responsibilities, as defined above, are nationwide. Therefore, when the divisions and chapters in the affected areas-are unable to meet the needs of the disaster victims, the resources of the total organization are made available.

All disaster assistance from the Red Cross is based on verified disaster caused need, and is an outright grant.

B. The United States Coast Guard has traditionally rendered aid and assistance and supplemented the efforts and resources of State and local governments and the American National Red Cross in mitigating and alleviating the human misery of distressed persons imperiled by disasters. Commensurate with the gravity of the situation and the facilities available, the Coast Guard performs the necessary acts to rescue, protect, and save persons and property thus endangered, and cooperates fully with duly constituted civil and military authorities and the American National Red Cross.

V. AUTHORITY FOR AND LEGAL STATUS

A. RED CROSS DISASTER SERVICES

The authority under which the American National Red Cross undertakes activities for the relief of persons suffering from disaster is stated in the following provision of its Charter enacted by the U.S. Congress on January 5, 1905, (36 U.S.C. 5):

". . . to continue and carry on a system of national and international relief in time of peace and apply the same in mitigating the sufferings caused by pestilence, famine, fire, floods and other great national calamities, and to devise and carry on measures for preventing the same."

The statement below, quoted from an opinion dated August 15, 1918, of the Honorable John W. Davis when he was a Solicitor General of the United States, describes in broad-terms the duty and obligation of the American National Red Cross to carry out the requirements of its Congressional Charter.

"When any question arises as to the scope and activities of the American Red Cross, it must always be remembered that its Charter is not only a grant of power but an imposition of duties. The American Red Cross is a quasi-governmental organization, operating under Congressional charter, officered in part, at least, by governmental appointment, disbursing its funds under the security of a governmental audit and designated by Presidential order for the fulfillment of certain treaty obligations into which the government has entered. It owes, therefore, to the government which it serves the distinct duty of discharging all those functions for which it was created. Not only is it constrained by those considerations growing out of its organic character, but there is also a moral obligation resting upon it to its membership and to the American people who have so freely and generously contributed to its support."

Status of the Red Cross under the Disaster Relief Act of 1974.

The role of the Red Cross Disaster Program under federal law has been restated in federal disaster legislation through the years, most recently in the Disaster Relief Act of 1974 (Public

Law 93-288), which says: ". . . nothing contained in this Act shall limit or in any way affect the responsibilities of the American National Red Cross under the Act of January 5, 1905 . . ."

The act and subsequent executive orders delegate the responsibility for coordinating federal response to emergencies and major disasters, as declared by the President of the United States, to the Federal Disaster Assistance Administration. The FDAA, in turn, has reaffirmed the role of the American-National Red Cross in its published regulations and in a memorandum of understanding signed on October 12, 1973, and amended to apply to PL 93-288 on September 4, 1974.

B. THE UNITED STATES COAST GUARD

The United States Coast Guard is empowered by statute to perform certain discretionary functions in the field of assistance and relief.

Title 14, USC (Section 88) states:

a. In order to render aid to distressed persons . . . on or under waters over which the United States has jurisdiction and in order to render aid to persons and property imperiled by flood, the Coast Guard may:

(1) perform any and all acts necessary to rescue and aid persons and save property;

(2) take charge of and protect all property saved from marine or aircraft disasters, or floods, at which the Coast Guard is present, until such property is claimed by persons legally authorized to receive it or until otherwise disposed of in accordance with law or applicable regulations, and care for bodies of those who may have perished in such catastrophes;

(3) furnish clothing, food, lodging, medicines, and other necessary supplies and services to persons succored by the Coast Guard; and . . .

b. The Coast Guard may render aid to persons and protect and save property at any time and. at any place at which Coast Guard facilities and personnel are available and can be effectively utilized

VI. ORGANIZATION

A. THE AMERICAN NATIONAL RED CROSS

The national headquarters of the American National Red Cross is located at 17th and D Streets, N. W., Washington, D. C. 20006. For administrative purposes, the United States is divided into four areas with each having jurisdiction covering a certain number of states. Area offices are located as follows: Eastern Area, Alexandria, Virginia 22314; Southeastern Are, 3. 1955 615 North St. Asaph Street, Monroe Drive, Atlanta, Georgia 30324; Midwestern Area, 10195 Corporate Square, St. Louis, Missouri 63132; Western Area. 1550 Sutter Street, San Francisco, California 94115. Each area has an administrative and field staff. Area offices report to national headquarters.

Area jurisdictions are regrouped into divisions, which report to the area office. Divisions are made up of groups of chapters, which report to a division manager at the headquarters chapter.

The chapter is the local unit of the American National Red Cross and is responsible for all local activities of the Red Cross within its territory, subject to the policies and regulations of the national organization. There are approximately 3,150 chapters in the United States, its territories and dependencies.

Each Red Cross chapter is responsible for developing a special disaster preparedness and relief organization, composed of the best-qualified and trained volunteers and staff available. Many chapters maintain radio-equipped vehicles which are immediately available for emergency use. Each chapter studies the disaster hazards of the territory and surveys local resources for personnel, equipment, and supplies, including transportation and emergency communication facilities, available for disaster relief. It also formulates cooperative plans and procedures with local governmental agencies and private organizations for carrying on relief operations should a disaster occur. Through its nationwide organization, the American National Red Cross coordinates its total resources for utilization wherever needed and required for large disasters.

B. THE UNITED STATES COAST GUARD

1. The Headquarters of the U. S. Coast Guard is located at 400 Seventh Street, S. W., Washington, D.C. 20590.

2. Coast Guard Area offices are:

   Atlantic Area Governors Island, New York, New York, 10004
   Pacific Area 630 Sansome Street, San Francisco, CA 94126

3. Coast Guard District Offices are:

   1st Coast Guard District - 150 Causeway Street, Boston, MA 02114
   2nd Coast Guard District - Federal Building, 1520 Market Street, St.Louis, MO 63103
   3rd Coast Guard District - Governors Island, New York, NY 10004
   5th Coast Guard District - Federal Building, 431 Crawford Street, Portsmouth, VA 23705
   7th Coast Guard District - Federal Building, 51 SW First Avenue, Miami, FL 33130
   8th Coast Guard District - Customhouse, New Orleans, LA 70130
   9th Coast Guard District - 1240 E. Ninth Street, Cleveland, OH 44199
   11th Coast Guard District -Heartwood Building, 19 Pine Avenue, Long Beach, CA 90802
   12th Coast Guard District - 630 Sansome Street, San Francisco, CA 94126
   13th Coast Guard District - 618 Second Avenue, Seattle, WA 98104
   14th Coast Guard District - P.O. Box 48, FPO, San Francisco, CA 96610
   17th Coast Guard District - FPO, Seattle, WA 98771

4. Any Coast Guard unit, district office or area office may render or may be called upon to render assistance.

5. Action is initiated by the Coast Guard command cognizant of the disaster situation, whether unit, district, or area command.

   a. Unit: The nearest unit begins rescue and other assistance immediately as appropriate, and notifies the district rescue coordination center of the nature, scope, and scale of the disaster.

b. District Rescue Coordination Center (RCC): Directs individual units as appropriate (ships, planes, etc.), and coordinates with other agencies, Federal, State, and local, governmental and private, in carrying out each one's responsibilities.

c. Should the disaster, catastrophe or emergency effects extend beyond the boundaries of a given Coast Guard district, or be beyond the capabilities of the local district, the area commander may assume full direction, supervision, and coordination of all activities of the several districts, and with other relief organizations.

6. Coast Guard activities will continue until the coordinating activity (on scene commander, district rescue coordination center, area rescue coordination center, or the Commandant of the Coast Guard) deems the emergency to be over, or the mission is accomplished.

7. Coast Guard personnel are to be under the command of Coast Guard personnel at all times.

VII. ARC - USCG COOPERATION AND COORDINATION

A. The Red Cross National Disaster Services Office and the Coast Guard Headquarters Military Readiness Division will conduct continuing liaison and exchange information of mutual interest regarding disaster relief preparedness measures and disaster relief activities.

B. Appropriate staff of the Disaster Services in Red Cross area offices, division headquarters, and chapters and Coast Guard area and district commanders, whose territories are mutually encompassing, should establish continuing liaison with each other in order to:

1. Develop cooperative disaster preparedness measures to be implemented in the event of a disaster or the threat thereof. The preparedness measures should include a plan which would permit the Red Cross and the Coast Guard to alert each other to a disaster situation or the threat thereof.

2. Effect coordinated operations and provide mutual support in the event of a disaster or the threat thereof .

3. Establish a system of communication for the expeditious exchange of information in the event of a disaster or the threat thereof.

VIII. MUTUAL SUPPORT

A. The American National Red Cross recognizes the responsibility of governmental authorities for the protection of life and property, including warning. rescue and evacuation. The Red Cross does not assume responsibility for governmental functions but supports the work of governmental authorities in alleviating the distress resulting from disasters.

B. During a domestic emergency the United States Coast Guard responds, whenever practical, to requests for support submitted by authorized Red Cross representatives. Forces not engaged in missions of greater urgency or statutory requirement may be assigned to assist the Red Cross as determined by the appropriate Coast Guard Commander. Support to the Red Cross may include but need not be limited to:

1. Movement of Red Cross relief supplies and e quipment.
2. Movement of Red Cross disaster services personnel.
3. Provision of watercraft and aircraft, including helicopters, for disaster relief missions and surveys.
4. Provision of mobile communications equipment.
5. Transmission of Red Cross emergency communications.
6. Transportation of emergency potable water.
7. Provision of emergency equipment and supplies for the immediate relief of distressed people.

C. In order to meet the peculiar requirements of Flood and Disaster operations, the Commandant may direct the movement of supporting Coast Guard forces between Districts, including aerial support for survey in connection with Flood and Disaster operations in districts in which no permanent Coast Guard aviation establishment is maintained.

IX. FUNDING

A. Normally, Coast Guard appropriations will be charged with all expenses incurred by the Coast Guard when it is engaged in disaster relief. Operating and maintenance expenses of equipment and temporary additional duty allowances of personnel of the district in which the disaster occurs shall constitute permanent charges to the appropriation Operating Expenses, Coast Guard, in accordance with usual governing Instructions.

In instances where normal Coast Guard resources are not available to support fully the efforts of the Red Cross in a natural disaster and additional equipment or personnel is requested of the Commandant by the American National Red Cross, the Commandant may authorize the inter-district transfer of the necessary equipment or personnel to assist the Red Cross.

The Red Cross has agreed to reimburse the Coast Guard for the following expenses for Coast Guard personnel and equipment transported at the request of the Red Cross from other districts into the district in which the disaster occurs:

1. Transportation of equipment to and from the district in which-the disaster occurs. This includes loading and unloading charges and cost of shipping.

2. Transportation and travel costs for personnel while in a travel status.

B. The American National Red Cross may request waiver of the payment of costs incurred by the U.S. Coast Guard in connection with items I and 2 of Section IX when such costs are reimbursable to the U.S. Coast Guard under the provisions of the Disaster Relief Act of 1974 (Public Law 93-288) as amended and Executive Orders issued thereunder-

Signed By	Signed By
Admiral Owne W. Siler	George M. Elsey
Commandant	President
United States Coast Guard	The American National Red Cross
4 April 1975	4 April 1975
Date:	Date:

U.S. Department of Homeland Security

United States Coast Guard

Commanding Officer
United States Coast Guard
Marine Safety Office

20 Risho Avenue
East Providence, RI 02914-1208
Phone: (401) 435-2300
Fax: (401) 435-2399

3006

MEMORANDUM

From: Mary E. Landry, CAPT

To: MSO Providence Team Coast Guard Members

Subj: PERSONAL PREPAREDNESS FOR HURRICANE SEASON

1. I am writing to ensure you and your families are prepared in the event of a hurricane. Having served in two very hurricane prone regions of the country, I cannot overemphasize the importance of being prepared. All of you are a vital resource for the MSO, the marine industry and the local community. It is essential that you, your family, and your household are prepared so that you are able to execute the mission of the Coast Guard. I am committed to providing the support network you and your family will need in the unfortunate event that a hurricane hits this region.

2. Hurricane season runs from June 1 to November 30. Hurricanes are more prevalent from August to October, with the month of September being the most active.

3. I urge each of you to prepare yourself and your household for potential hurricanes by taking the steps noted on the attached sheet. Taking action now could prove beneficial to you and your families throughout the upcoming hurricane season.

#

Enclosure: Dependent Preparation Plan

Dependent Preparation Plan

A. Purpose. The purpose of this plan is to advise all MSO Providence personnel of some of the proper actions to be taken for their families in the event of a hurricane.

B. This plan is based upon the premise that a hurricane may separate MSO Providence personnel from their dependents. Families must be prepared with a plan to assume the burden of self-protection and survival in the absence of the military member. The local community and news media publish a great deal of hurricane information prior to the onset of hurricane season. This information will provide every family with some of the basic knowledge to prepare for and survive a hurricane. DISCUSS THIS INFORMATION AT HOME. HAVE A PLAN. The Federal Emergency Management Agency's Hurricane Preparedness Information website (http://www.fema.gov/hazards/hurricanes) gives useful information on what you should do:

- Before Hurricane Season Starts
- During A Hurricane Watch
- During A Hurricane Warning
- After The Storm

C. Pre-Storm Preparations: MSO Providence dependents should:

1. Listen for weather updates on local radio and television stations; DON'T trust rumors;
2. Listen to the Emergency Broadcasting System (EBS) radio stations:

	RHODE ISLAND	**MASSACHUSETTS**	**CONNECTICUT**
Primary	WPRO 92.3 MHz FM	WBZ 1030 MHz AM	NPR 89.1 MHz FM
Secondary	WPRO 630 MHz AM	WPRO 92.3 MHz FM	WSUB 980 MHz AM
Tertiary	WWLI 105.1 MHz FM	WQRC 99.9 MHz FM (cape & Islands)	WKCT 107.7 MHz FM

3. Adjust your refrigerator to lowest setting;
4. Refill medical prescriptions (obtain at least a two weeks supply);
5. Use clean containers and bathtub for storing water;
6. Contact MSO Providence only in an emergency. Communication facilities will be at a premium, and every effort must be made to minimize the communications burden.
7. Have a vehicle that is operational and fully fueled. Check oil, water and tires. (Remember gas pumps do not operate without electricity.)
8. Make plans for your pets; make arrangements for them if you plan to go to a shelter. Contact animal specialists--veterinarian, Humane Society of SPCA, local animal control, etc.
9. Inventory your property before hurricane season starts; store this information with insurance papers in a safe place.
10. Prepare a hurricane "kit" (whether you evacuate or stay at home) containing:
    a. Local & New England state maps;
    b. Pamphlet with locations of emergency evacuation routes and emergency shelters;
    c. A battery-powered portable radio with spare batteries (NOAA weather radio is recommended);
    d. A flashlight and batteries (and spare batteries);
    e. A supply of fresh water and water purifying kit (e.g., 3 gallons per person per day for all uses);

f. Maintain adequate stockpiles to last for two weeks: food, manual can opener, dishes, prescriptions, medicines, personal care items (toilet paper, toothbrush, toothpaste, deodorant, etc.), pillows, sleeping bags, blankets, extra clothing, eye glasses, infant necessities (diapers, formula, bottles, pre-moistened towelettes, etc.), insect repellent, two ice coolers and ice, charcoal, quiet games, books, playing cards, and favorite toys for kids, etc.;

g. Important papers including drivers license, special medical information, insurance policies, and property inventories;

h. Sufficient funds - cash, bank and travelers checks, credit cards - available to ensure a minimum economic stability for two to three weeks. (Banks and ATMs don't work without electricity and few stores will be able to accept credit cards.)

i. Plastic tarp, screening, garbage bags, tools, nails, and cleaning supplies to conduct emergency repairs after the storm passage

j. First Aid Kit

k. Camera and film

11. Understand and make preparations for the hazards associated with hurricane conditions. Some examples include: power outages, electrocution hazards from downed power lines, flooding hazards (e.g. turn off the electricity at the main breaker before your house floods, watch out for snakes, etc.), water and sewage outages, food shortages (e.g., plan on at least three gallons per day per person for all uses), projectile hazards from loose objects, effects of high winds (e.g., shutter, board up or tape windows to reduce risk of broken windows and flying glass). Stay away from windows, glass doors, and skylights.

D. <u>After the Storm</u>

1. <u>Reentry:</u>

a. Be Patient. Access to affected areas will be controlled. You won't be able to return to your home until search and rescue operations are complete and safety hazards, such as downed trees and power lines, are cleared. It may take up to three days for emergency crews to reach your neighborhood. It may take two to four weeks before utilities are restored.

b. Stay tuned to your local radio station for advice and instructions about emergency medical aid, food and other forms of assistance.

c. Have valid ID. Security operations will include checkpoints. Valid identification with your current local address will be required.

d. Avoid driving. Roads will have debris, which will puncture your tires.

e. Don't sightsee, especially at night. You may be mistaken for a looter and shot.

2. <u>For Your Safety:</u>

a. Avoid downed or dangling utility wires. Metal fences may have been "energized" by fallen wire. Be especially careful when cutting or clearing fallen trees. They may have power lines tangled in them.

b. Beware of snakes, insects or animals driven to higher ground by floods.

c. Enter your home with caution. Open windows and doors to ventilate and dry your home.

d. If there has been flooding, have an electrician inspect your home or office before turning on the breaker.

e. Be careful with fire. Do not strike a match until you are sure there are no breaks in gas lines. Avoid candles. Use battery-operated flashlights and lanterns instead.

f. Keep grills for cooking outdoors in a well-ventilated area.

g. Assess and photograph damage to your home and its contents.

h. Use your telephone only for emergencies to keep lines open for emergency communications.

3. Repairs:

   a. Make temporary repairs to correct safety hazards and minimize further damage.

   b. Only hired licensed contractors to do other repairs. Check with the local Building Department to ensure the contractor is licensed. If you do hire a contractor, do not pull the permits for them. If they ask you to do so, this may be an indication that they are not properly licensed.

4. Generators:

   a. Fueled by gas, generators can run appliances and fans. If you have lost power, don't connect a generator to building wiring. (This could injure or kill neighbors or electrical crews.) Plug appliances, etc. directly into the generator and place it in a well-ventilated area. Don't forget to check the oil every time you add gas. Conserve fuel by alternating appliances. For example, refrigerators can be kept cool by supplying only eight hours of power a day.

5. Clean-up Precautions:

   a. Call professionals to remove large, uprooted trees.

   b. Always use safety equipment such as heavy gloves, safety goggles, heavy boots, long-sleeved shirts and pants.

   c. Tie back long hair and wear a hat and sunscreen.

   d. Drink plenty of fluids and rest and ask for help when you need it.

   e. Lift with the legs, not with the back.

   f. Don't burn trash.

   g. If you can't identify something, don't touch it.

   h. Be especially wary of downed power lines.

   i. Be especially careful with a chain saw.

6. Water Precautions:

   a. Whenever widespread flooding occurs, there is potential for bacterial contamination. Bacteria such as shigella and salmonella can lead to life-threatening dehydration for people and their pets if untreated by antibiotics.

   b. Disinfect any tap water you drink or use for cooking or cleaning. You must purify tap water until officials notify you of its safety. Bring water to a rolling boil or use water purification tablets.

   c. Properly stored water should be good for 2-3 weeks.

   d. Other precautions to remember: use disinfected water for brushing teeth, cleaning contact lenses and washing hands. This is important in preventing the spread of disease.

ANNEX K TO MSO PROVIDENCE SEVERE WEATHER CONTINGENCY PLAN
EMERGENCY TELEPHONE NUMBERS

CG District One Command Center, Boston	(800) 848-3942 Ext 8555
CG Group Woods Hole Operations Center	(508) 457-3214 / 3210 / 3211
CG National Response Center (NRC)	(800) 424-8802
Environmental Protection Agency (EPA) Region 1	(617) 223-7265
Air Station Cape Cod	(508) 968-6360 / 6361
National Strike Force Coordination Center (NSFCC)	(252) 331-6000 (N) (888) 914-0161
Atlantic Strike Team (AST)	(609) 724-0008 / 0009 (N) (888) 581-5152
NOAA Scientific Support Coordinator (SSC)	(617) 223-8016 (P) (800) 759-7243 Pin # 5798814
Federal Emergency Management Agency (FEMA)	(617) 223-9540
Naval Station Newport	(401) 841-3456
National Weather Service	
Taunton	(508) 823-2226 / 2262
Boston	(617) 223-3110
Massachusetts Emergency Management Agency (Bunker)	(508) 820-2000
Rhode Island Emergency Management Agency	(401) 946-9996
Red Cross	
Rhode Island Chapter	(401) 831-7700
New Bedford Chapter	(508) 996-8286
Cape Cod Chapter	(508) 775-1540
Massachusetts Dept of Environmental Protection (MADEP)	(D) 508-946-2850 (N) (800) 304-1133
Rhode Island Dept of Environmental Mgmt (RIDEM)	(401) 222-3070
Bridge Control	
Army Corps of Engineers (Cape Cod Canal Bridges)	(508) 759-4431 Ext 12
Rhode Island Bridge & Turnpike Authority (Newport & Mt Hope Bridges)	(401) 423-0800
Rhode Island Department of Transportation (RIDOT) (Jamestown Bridge)	(401) 222-2694 Ext 4100
Army Corps of Engineers (Cape Cod Canal Control)	(508) 759-4431 Ext 11
New Bedford Hurricane Barrier	(D) (508) 994-4243 (N) (508) 759-4431
Providence Hurricane Barrier	(401) 421-1525
Massachusetts State Police	(508) 820-2121
Rhode Island State Police	(401) 444-1000
Northeast Pilots	(800) 274-1216

ANNEX L TO MSO PROVIDENCE SEVERE WEATHER CONTINGENCY PLAN
WIND AND STORM CONDITIONS

Wind Conditions.

1. A **small craft advisory** is issued when winds in excess of 22 knots (25 mph), and less than 34 knots (39 mph), are forecasted or are occurring that may cause hazardous conditions for operators of small vessels.

a. Take prudent actions to ensure safety of life, property and environment.

2. A **gale warning** is an advisory of strong winds. The advisory is given when winds 39 to 54 miles per hour (34 to 47 knots) are forecasted or are occurring. Once sustained winds of 35 mph are reached all lightering operations shall be secured (it's the law in RI). Sustained winds are determined by averaging the observed values over a one-minute period.

a. Designated waterfront facilities should take appropriate safety precautions in accordance with their approved operations manual. The Command Duty Officer shall ensure a Safety Marine Information Broadcast request is submitted to Group Woods Hole via CGMS (see below example) whenever the National Weather Service issues gale warnings affecting the MSO Providence area of responsibility.

R XXXXXXZ XXX XX
FM COGARD MSO PROVIDENCE RI
TO COMCOGARDGRU WOODS HOLE MA
BT
UNCLAS
SUBJ: SAFETY MARINE INFORMATION BROADCAST
1. FOR GRU WOODS HOLE, REQUEST SAFETY MARINE INFORMATION BCST COMMENCING UPON RECEIPT AND EVERY 4 HRS UNTIL STORM WARNINGS ARE LIFTED. QUOTE: RHODE ISLAND AND SE MASSACHUSETTS; NATIONAL WEATHER SERVICE HAS ISSUED A STRONG WIND ADVISORY FOR ALL COASTAL WATERS OF RHODE ISLAND AND MASSACHUSETTS INCLUDING BLOCK ISLAND, CAPE COD AND THE ISLANDS. STRONG WESTERLY GALES OF 30 TO 40 MPH WILL DEVELOP WITH FREQUENT GUSTS TO AROUND 55 MPH. ALL VESSELS AT ANCHOR WITHIN THIS AREA ARE REQUESTED TO CHECK THEIR POSITIONS AND BE ALERT FOR DRAGGING ANCHOR. IN THE EVENT A VESSEL IS UNABLE TO MAINTAIN POSITION AT ANCHORAGE, THE MASTER IS STRONGLY ENCOURAGED TO PUT TO SEA. UNQUOTE.
BT
NNNN

Storm Conditions.

1. A **storm condition** is set to advise Coast Guard commands within the First District of severe weather conditions other than those associated with hurricanes (which are tropical air mass storms). Storms may contain high and gusty winds, heavy rain, snow and/or hail and are accompanied by unusually high tides. Storm conditions will be set when sustained winds of 50 kts or greater are forecast.

2. Upon receiving notification of forecasted storm conditions, the following items should be performed. Additional hurricane checklist items may be implemented as necessary.

a. Operations permitting, advise members of maritime community by sending storm condition MSIB (e-mail or fax)
b. Conduct Port Surveys (per chapter 2 hurricane checklist)
   (1) Vessel arrivals in port and at anchor
   (2) Lightering and cargo operations per paragraph 2 above.
c. Obtain daily updates from National Weather Service (NWS) in Taunton, MA.
d. Liaison with Emergency Management Agencies, Port Safety Team, Army Corps of Engineers, and Pilots, etc., as necessary.
e. Consider sending government vehicles home with duty section personnel or port survey team member.

3. Post Storm.

a. Assess impact to personnel (personnel call in; report status)
b. Assess damage to Coast Guard buildings and equipment (if damaged, repair and return to service)
c. Survey AOR – using vehicles, vessels, and helo (liaison with Northeast Pilots as necessary). Submit message report of damage via SITREP to D1. **Negative reports are not required.**

Note: (1) Please refer to the MSO Providence Watchstander's Guide, MSOPROVINST M1601.2 for additional specific actions to be taken by the duty section once notified of a severe weather threat (e.g., nor'easter, snowstorm).

(2) Attainment reports are not required.

COMMANDING OFFICER
U.S. COAST GUARD MARINE SAFETY OFFICE
CAPTAIN OF THE PORT
20 RISHO AVENUE
EAST PROVIDENCE, RI 02914-1208
(401) 435-2335 or 1-(800) 644-0217

MARINE SAFETY INFORMATION BULLETIN

[MSIB # 01-02]
mmmm/dd/yyyy, time issued

SEVERE WEATHER – JANUARY 20 – 21, 2000

The National Weather Service has forecasted a "Tremendous Marine Storm" for our area. Severe weather and high winds are expected from now until Friday evening.

This storm is expected to intensify rapidly today. The low-pressure area of the storm is currently centered over Cape Hatteras, NC, and is moving towards New England. Winds are expected to reach 30 to 45 knots from the northeast after sunset tonight. After midnight, the winds will increase to 45 to 65 knots from the north. Winds are forecasted to remain over 30 knots until after sunset Friday. Open water seas will be 10 to 20 feet, with 8 to 16 foot seas in the bays. Due to the full moon, tides will run 2 to 4 feet above normal. Visibility will decrease in snow squalls. The current forecast of 3 to 6 inches of snow is expected to increase.

This is a potentially dangerous and life threatening storm for Cape Cod and the islands. All mariners are strongly advised to seek safe haven until the storm passes. While at anchor, vessels should maintain an anchor watch and keep engines on standby. Moored vessels should double-up on mooring lines and be ready to get underway if necessary. Terminal mangers should identify any actions which may need to be taken for this storm.

All vessels and facilities should continue to monitor NOAA or other broadcast weather forecasts for changing weather forecasts and current conditions.

As always, any vessel casualties or pollution should be reported to the local Marine Safety Office.

COTP Name
Captain, U.S. Coast Guard
Captain of the Port